CITY PLANNING BOARD

BOARD AGENDA

Planning Board Regular Meeting - Tuesday, June 9, 2015 - 6:00 p.m.
City Hall - City Commission Chambers, 100 North U.S. #1, Fort Pierce, Florida

1. **CALL TO ORDER**

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL**

4. **CONSIDERATION OF ABSENCES**

5. **CERTIFICATION OF ALTERNATE MEMBER VOTING STATUS**

6. **APPROVAL OF MINUTES**

   a. May 12, 2015 Meeting

7. **NEW BUSINESS**

   a. Site Plan - Lawnwood Medical Center - 1860 N. Lawnwood Circle

   b. Planned Development (PD), Zoning Atlas Amendment & Preliminary Plat - Inlet Palms - 1502 Seaway Drive

   c. Planned Development (PD) - Rocla Concrete Tie Manufacturing Plant - 600 S. 3rd Street

8. **BOARD COMMENTS**

9. **ADJOURNMENT**

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

Planning Board **6. a.**

Meeting Date: 06/09/2015

Information

REQUESTED ACTION

May 12, 2015 Meeting

LOCATION

RESPONSIBLE STAFF

RECOMMENDATION

Attachments

Planning Board Minutes 5/12/15

Form Review

Form Started By: Alicia Rosenthal Started On: 05/18/2015 11:45 AM

Final Approval Date: 06/01/2015

D R A F T

CITY OF FORT PIERCE
PLANNING BOARD

Planning Board Minutes

OF THE REGULAR MEETING OF THE FORT PIERCE CITY PLANNING BOARD HELD ON TUESDAY, MAY 12, 2015 IN FORT PIERCE CITY HALL, COMMISSION CHAMBERS, 100 NORTH US HIGHWAY 1, FORT PIERCE, FLORIDA.

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Present: Eloise Cummings; John George; Erica Ganzi; Tim O'Connell; Robert Poitier; Charles Hayek; Marcia Baker; Mike Dahan; Brian Paul; Steve Weaver; Bob Burdge, Chairman

Absent: Eduardo Mujica

Staff Present: James Walker, Assistant City Attorney
Rebecca Grohall, AICP, Planning Manager
Kori Benton, Senior Planner
Clarissa Davis, Planner
Alicia Rosenthal, Administrative Assistant

4. CONSIDERATION OF ABSENCES

Motion was made by Marcia Baker, and seconded by Erica Ganzi to excuse the absence of Mr. Mujica.

AYE: Mike Dahan, Marcia Baker, Charles Hayek, Robert Poitier, Tim O'Connell, Erica Ganzi, John George, Eloise Cummings, Brian Paul, Chairman Bob Burdge

Passed

5. CERTIFICATION OF ALTERNATE MEMBER VOTING STATUS

Mr. Poitier was made an active member for the meeting.

6. APPROVAL OF MINUTES

a. April 14, 2015 Meeting

Motion was made by Marcia Baker, and seconded by John George to approve the minutes from the April 14, 2015 meeting.

AYE: Erica Ganzi, Tim O'Connell, Robert Poitier, Charles Hayek, Marcia Baker, Mike Dahan, Brian Paul, Eloise Cummings, John George, Chairman Bob Burdge

Passed

7. NEW BUSINESS

a. Annexation - South US Hwy 1 Corridor

Ms. Davis gave an overview of the South US Hwy 1 Corridor Annexation. Ms. Grohall explained the FPUA retail service boundary is the ultimate city limits. Steve Tierney, Attorney representing Sunrise Ford Company, spoke against the annexation. The Board discussed the annexation and asked questions of Ms. Davis, Ms Grohall and Mr. Tierney. Mr. Walker stated he is quite confident that legally the city's position is sound.

Motion was made by Marcia Baker, and seconded by John George to forward a recommendation of approval to the City Commission to annex these parcels into Fort Pierce City Limits as it furthers the goals, objectives and policies of the Comprehensive Plan.

AYE: John George, Tim O'Connell, Robert Poitier, Charles Hayek, Marcia Baker, Mike Dahan, Chairman Bob Burdge

NAY: Eloise Cummings, Erica Ganzi, Brian Paul

Passed

b. Annexation - Various Locations

Ms. Davis gave an overview of the annexation and answered questions from the Board. The Board discussed the annexation and Ms. Davis provided additional information.

Motion was made by Marcia Baker, and seconded by John George to forward a recommendation of approval to the City Commission to annex these parcels into Fort Pierce City Limits as it furthers the goals, objectives and policies of the Comprehensive Plan.

AYE: Brian Paul, Mike Dahan, Marcia Baker, Charles Hayek, Robert Poitier, Tim O'Connell, Erica Ganzi, John George, Eloise Cummings, Chairman Bob Burdge

Passed

c. Conceptual Development Plan - Pro Team Med - Drug & Alcohol Treatment Center - 3295 S US Highway 1

Mr. Benton gave an overview of the application and stated the representative of the project has since changed his company, so the staff report should be updated to reflect the new company name. The Board discussed the Conceptual Development Plan and asked questions of Mr. Benton. Brad Currie, Representative from Engineering Design and Construction, spoke on the type of use and the process they are going through for Pro Team Med. Mr. Currie answered questions from the Board and Mr. Benton provided additional information.

Motion was made by Erica Ganzi, and seconded by John George to forward a recommendation of approval to the City Commission for the Conceptual Development Plan.

AYE: John George, Erica Ganzi, Tim O'Connell, Robert Poitier, Charles Hayek, Mike Dahan, Brian Paul, Eloise Cummings, Chairman Bob Burdge

NAY: Marcia Baker

Passed

8. BOARD COMMENTS

9. ADJOURNMENT

Planning Board **7. a.**

Meeting Date: 06/09/2015

Information

REQUESTED ACTION

Site Plan - Lawnwood Medical Center - 1860 N. Lawnwood Circle

LOCATION

1860 N. Lawnwood Circle

RESPONSIBLE STAFF

Clarissa Davis, Planner

RECOMMENDATION

Staff recommends that the Planning Board forward a recommendation of **approval** to the City Commission with the following conditions: Updated Site Plan application, Capacity Analysis and narrative needed to show correct proposed square footage prior to City Commission.

Attachments

Staff Report
Development Review Application
Design Review Application
Concurrency Review
Warranty Deed
Location Map
Neighborhood Mapping
Narrative
Site Plan, Civil, Landscape, etc.
Color Elevations
Traffic Statement
TRC Comments & Response

Form Review

Form Started By: Clarissa Davis Started On: 06/02/2015 03:26 PM

Final Approval Date: 06/03/2015

CITY OF FORT PIERCE

PLANNING DEPARTMENT

REBECCA GROHALL, AICP, PLANNING MANAGER
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

TO: Members of the City of Fort Pierce Planning Board

THROUGH: Rebecca Grohall, AICP, Planning Manager

FROM: Clarissa Davis, Planner

RE: 1860 N. Lawnwood Circle – Conditional Use w/ New Construction - Lawnwood Pavilion

DATE: June 2nd, 2015

STAFF REPORT

Owner/Applicant: Lawnwood Medical Center, Inc. (Greg Lowe, VP)
One Park Place
Nashville, Tennessee 37203

Representative: George Huddleston, P.E., Project Manager; Littlejohn
1615 Edgewater Drive, Suite 180
Orlando, Florida 32804

Requested Action: Approval of a Conditional Use to construct a 13,412 square-foot addition to an existing structure.

Location: 1860 N. Lawnwood Circle

Parcel ID: 2416-504-0199-030-0

Zoning: C-1, Office Commercial

Surrounding Zoning:

North	East	South	West
OS-1	R-4	C-1	R-3/OS-1

Future Land Use: INST, Institutional

Parcel Size: 7.54 acres

Utilities: Located within the FPUA Retail Service Area

Staff Analysis:

The applicant is requesting approval of a Conditional Use with New Construction application to develop a 13,412 square-foot addition to the existing structure, as well as construct a generator enclosure and an oxygen park at the Lawnwood Pavilion site located at 1860 N. Lawnwood Circle. The existing facility is a satellite location for Lawnwood Regional Medical Hospital located at 1700 S 23rd Street. Lawnwood Pavilion provides extra beds to patients when capacity at the main Lawnwood campus may reach its limit and is utilized as a physical rehabilitation facility. Presently, the 52,375 square-foot facility has fifty-eight (58) licensed beds. The proposal is to provide an additional ten (10) beds to the facility with six (6) more beds to be added in the future. This site is also shared by a 5,536 square-foot medical office.

Because this is an addition to the Lawnwood Pavilion structure, the architectural aesthetics, as well as structure height will match what is existing. The color scheme and architectural style will be consistent throughout the facility. The addition will be constructed over existing impervious area; what is now the off-street parking. Parking for the facility is being shifted to accommodate the addition and have met the requirements within code Section 22-60 Off-Street Parking. A 1,468 square-foot generator enclosure will be constructed on site as well as a 308 square-foot oxygen park.

The property has an abundance of existing vegetation, however the applicant is proposing additional Live Oaks, Crape Myrtle, Royal Palms as well as a number of shrubs to be added.

TRC Comments:

TRC Comments as well as the applicant's response is attached to this staff report. The applicants will continue to work with each respective department.

Staff Recommendation:

Staff recommends that the Planning Board forward a recommendation of **approval** to the City Commission with the following conditions: Updated Site Plan application, Capacity Analysis and narrative needed to show correct proposed square footage prior to City Commission.

CITY OF FORT PIERCE

PLANNING DEPARTMENT

Rebecca Grohall, AICP, Planning Manager
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

DEVELOPMENT REVIEW

Property address or Location 1860 N Lawnwood Circle, Ft. Pierce, Florida 34950

Parcel ID #(s) 2416-504-0199-030-0

Project description 16 bed physical rehabilitation addition to Lawnwood Pavilion

Lawnwood Medical Center, Inc. (Greg Lowe, VP)	George Huddleston, Project Manager, Littlejohn
Property Owner(s)	**Applicant/Representative, Title, Company**
One Park Place	1615 Edgewater Drive, Suite 180
Street Address	Street Address
Nashville, Tennessee 37203	Orlando, Florida 32804
City State Zip	City State Zip
772-461-4000	407-975-1273
Phone Number	Phone Number
Darryl.DeYoung@hcahealthcare.com	ghuddleston@leainc.com
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

Property Owner(s) Signature(s)

STATE OF FLORIDA STLUCIE COUNTY

The foregoing instrument was acknowledged before me this 5 day of MAY, 20 15, by Greg Lowe who is personally known to me or has produced _____ as identification.

Patricia C Rochedieu
Signature of Notary

PATRICIA C. ROCHEDIEU
MY COMMISSION # FF 075003
EXPIRES: April 5, 2018
(seal) Bonded Thru Notary Public Underwriters

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____
Intake Planner_____
Planner Assigned_____
Approved By_____Date _____
Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

☐ DEVELOPMENT REVIEW

General Information

- ☐ Incomplete application packets cannot be accepted.
- ☐ Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

Choose Application Type:

Application Type		
☒ Site Plan	☒ Conditional Use with New Const.	☐ Major Amendment
☐ Conceptual Development Plan		☐ Minor Amendment

Site Information:

Non-Residential: Proposed Sq. Ft.: 12,378 Residential: Proposed Units:_____

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

North	South	East	West
Recreational	Medical Office	Duplexes	Single Family

Application Outlook



Site Plan submittal requirements:

Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals. Per phone call with planning staff, 1 original, 4 copies (total of 5) needed for initial submittal

- ☒ Complete notarized application
- ☒ Warranty Deed
- ☒ SLC Property Record Card
- ☒ Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- ☒ General location map (see Section 22-58.d.2)
- ☒ Survey (see Section 22-58.d.3)
- ☒ Site Plan (see Section 22-58.d.4)
- ☒ Landscaping Plan (see Section 22-187)
- ☒ Storm Drainage Plan (see Section 22-58.d.6)
- ☐ Environmental Impact Report N/A
- ☐ Beach/Dune System protection plan, if applicable (see Section 22-58.d.7) N/A
- ☒ Lighting Plan (see Section 22-58.d.8)
- ☒ Design Review submittals (see Design Review application)
- ☒ Traffic Impact Report
- ☒ Concurrency Review submittals (see Concurrency Review application)

City of Fort Pierce

Planning Department

Rebecca Grohall, AICP, Planning Manager
Comprehensive Planning ◊ Development Review
Historic Preservation ◊ Urban Design ◊ Zoning

Design Review

Property address or Location 1860 N Lawnwood Circle, Ft. Pierce, FL 34950
Parcel ID #(s) 2416-504-0199-030-0
Project Description 16 bed physical rehabilitation addition to Lawnwood Pavilion

Lawnwood Medical Center, Inc. (Greg Lowe, VP)	George Huddleston, Project Manager, Littlejohn
Property Owner(s)	Applicant/Representative, Title, Company
One Park Plaza	1615 Edgewater Drive, Suite 180
Street Address	Street Address
Nashville, Tennessee 37203	Orlando, Florida 32804
City State Zip	City State Zip
772-461-4000	407-975-1273
Phone Number	Phone Number
Darryl.DeYoung@hcahealthcare.com	ghuddleston@leainc.com
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Application (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

Property Owner(s) Signature(s)

STATE OF FLORIDA -- ST LUCIE COUNTY
The foregoing instrument was acknowledged before me this 5 day of MAY, 20 15, by

Greg Lowe who is personally known to me or has produced

as identification.

Patricia C Rochedieu
Signature of Notary

PATRICIA C. ROCHEDIEU
MY COMMISSION # FF 075003
EXPIRES: April 5, 2018
Bonded Thru Notary Public Underwriters
[Seal]

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic Districts	Historic Designation

Pre-Application Meeting Date _____ Fees _____ Control # _____ B. Permit _____
Intake Planner _____
Planner Assigned _____
Approved _____ Date _____
Comments _____

Intake Date Stamp

Design Review Application Checklist
(City Code of Ordinances 22-59)

Submittal for Administrative Approval

a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 22-194, location of bordering streets and, if applicable, wetlands and beaches.
b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment and other site features that may influence design elements.
c. A draft written narrative describing the design intent of the project, its goals and objectives and how it reflects the site analysis study results.
d. Context photographs of neighboring uses and architectural styles.
e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
j. Exterior elevations showing architectural character, external architectural features and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
k. Design review concurrent with conceptual development plan procedure according to subsection 22-58(e) is also available.

Submittal for Board Approval

a. A written narrative describing how the project conforms to administrative approval and design review guidelines of this section.
b. A final site plan meeting the requirements of section 22-58
c. A final site lighting plan that meets the requirements of subsection 22-58(d)(8).
d. A final landscape plan that meets the requirements of Article XII, Landscaping and Trees.
e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.

CITY OF FORT PIERCE
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING DIVISION

COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Recreational	Institutional	OS1-General & Recreational Open Space
South	Medical Office	Offices - Professional and Business Services	C1-Office Commercial
East	Duplex	Medium Density Residential	R4-Medium Density Residential
West	Single Family	Low Density Residential	R3-Single Family Moderate Density

	Future Land Use	Zoning Classification	Maximum Intensity **Residential: Dwelling Units per Acre** **Other: Square Footage**	Total Acreage	Flood Zone
Current	Institutional	C-1 Office Commercial	Existing Building: 59,002 SF	7.54	N/A
****Proposed**	Institutional	C-1 Office Commercial	Total Proposed: 71,380 SF	7.54	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	7,375 Total gallons per day
**Proposed Zoning/FLU	9,:34 Total gallons per day
**Change in Demand	2,659 Total gallons per day

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	6,:11 Total gallons per day
**Proposed Zoning/FLU	8,249 Total gallons per day
**Change in Demand	2,349 Total gallons per day

C. Parks and Recreation (Residential Classifications Only):
(Du x 2.6 = persons + 44,227 = population /LOS)

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people			
Urban District	5 acres per 1,000 people			
Community	2.5 acres per 1,000 people			
Neighborhood	1.36 acres per 1,000 people			

D. Public Schools (Residential Classifications Only):
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

	K-8	High
School Name		
City		
Distance		
Current Zoning/FLU Enrollment Demand		
****Proposed Zoning/FLU Enrollment Demand**		
****Change in Demand**		

E. Solid Waste:
2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units

Demand Analysis	Maximum
Current Zoning/FLU	2 ev n qtufs fyjtujoh
****Proposed Zoning/FLU**	2 ev n qtufs qspqptfe
***Change in Demand**	o0b

F. Stormwater:
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

Impact	Tupsn xbufs xjmm cf buufovbufe up mftt uibo qsf-efwfmpqfe svopgg sbuft boe qfsnjuufe uispvhi TGXNE/ Bmuipvhi jnqfswjpvt dpwfsbhf jt cfjoh jodsfbtfe, uif mptt jo tvsgjdjbm xbufs tupsbhf jt ofhmjhjcmf/

III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU		
****Proposed Zoning/FLU**	**See Traffic**	**Impact Study**
***Change in Demand**	Trips	Trips
Impact to Capacity		

IV. Project Description

PHASING
Is this project (phase) part of a larger project? [ ] Yes [X] No
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.
Total Project: Residential Units: Single Family: Multifamily:
Non-residential (square footage): 23,489 TG Beejujpo (Qibtf J-Upubm)
Mixed-use (describe use):
(If this is a single phase project, name it Phase I – Total)

RESIDENTIAL DATA					
Type	**Phase**	**Number of Units**	**Acres**	**Expected beginning date**	**Expected completion date**
Single-family, detached					
Single-family, attached					
Multi-family					
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**
Qiztjdbm Sfibcjmjubujpo	J-Upubm	23,489		09/2015	09/2016

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. [ ] Yes [X] No

B. 1. Does this application involve demolition or re-use of any structure(s)? [ ] Yes [X] No
If yes, what is the size of the structure(s) to be demolished or re-used? _____

2. What is the current use of the structure to be demolished or re-used? _____

3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? [ ] Yes [ ] No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

** Complete section if requesting a change in zoning, future land use, or expanding

951642

10.50
559

WARRANTY DEED
FROM INDIVIDUAL TO CORPORATION

RAMCO FORM 34

This Warranty Deed Made the 2nd day of March A. D. 1989 by DOYLE ROGERS, Trustee hereinafter called the grantor, to LAWNWOOD MEDICAL CENTER, INC., a corporation existing under the laws of the State of Florida, with its permanent postoffice address at P. O. Box 550, One Park Plaza, Nashville, Tenn. 37202 hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

Witnesseth: That the grantor, for and in consideration of the sum of $ 10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in St. Lucie County, Florida, viz:

The property described on Exhibit "A" attached hereto and made a part hereof.

The Grantor herein, upon the execution and delivery of this Deed, certifies that the property described herein is not, and never has been, his homestead property; that he is and for many years, has been a resident of Palm Beach County, Florida.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 19 89.

In Witness Whereof, the said grantor has hereunto set his hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Leah D. Weaver

Claire C. Peterson

Doyle Rogers (L.S.)
Doyle Rogers, Trustee

(L.S.)

STATE OF FLORIDA,
COUNTY OF Palm Beach

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgments, personally appeared DOYLE ROGERS, Trustee

to me known to be the person described in and who executed the foregoing instrument and he acknowledged before me that he executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 2nd day of March, A. D. 19 89.

Claire C. Peterson
Notary Public, State of Florida
My Commission Expires Dec. 22, 1991
Bonded Thru Troy Fain - Insurance Inc.

This Instrument prepared by:
Address

Charles R. P. Brown
SWANN AND HADDOCK, P. A.
300 South Sixth Street
Fort Pierce, FL 34950

O. R. BOOK 626 PAGE 2606

LEGAL DESCRIPTION

A part of Lawnwood Addition as recorded in Plat Book 2, Page 16, St. Lucie County, Florida, being more particularly described as follows:

Begin at the Northwest corner of Block 25, thence S 00°05'47" E along the West line of Block 25 and along the East right-of-way of South 21 Street a distance of 273.49 feet to the existing Northerly right-of-way of a 60.00 foot right of-way as recorded in Official Record Book 261, Page 667, Public Records of St. Lucie County, Florida; thence S 55°06'06" E along said right-of-way a distance of 48.54 feet to a point of curvature of a curve concave to the Southwest, said curve having a radius of 972.25 feet; thence Southeasterly along said curve through a central angle of 23°58'02" a distance of 406.70 feet; thence S 31°08'04" E along said right-of-way a distance of 197.44 feet to the Northerly right-of-way of a 60.00 foot right-of-way for "Lawnwood Circle North" as recorded in Official Record Book 268, Page 1540 of the Public Records of St. Lucie County, Florida, said point being on the arc of a curve concave to the South, having a radius of 462.94 feet, whose chord bears N 73°53'06" E; thence Easterly along said curve and along said right-of-way through a central angle of 22°36'29" a distance of 182.67 feet to the West line of a 50.00-foot wide drainage right-of-way for South 19th Street Canal; thence N 01°25'00" E along said right-of-way a distance of 200.70 feet to the South side of a vacated 16.00 feet alley running through Block 30; thence N 00°06'27" E continuing along said drainage right-of-way and along the East line of Block 25 a distance of 507.90 feet to the Northeast corner of Block 25; thence N 89°25'13" W a distance of 598.62 feet to the **POINT OF BEGINNING.**

Subject to easements, rights-of-way or reservations of Public Record.

Parcel contains 7.54 acres more or less.

951642

MAR -8 P3:28

Exhibit "A"

O.R. BOOK 626 PAGE 2607



0 150 300 600 Feet

Location Map

Lawnwood Pavilion Rehabilitation Center Addition

Legend

- Parcel Borders/Right-of-Way
- Vehicular Access to Site
- Drainage Canal

Zoning

- General Commercial
- Office Commercial
- Single Family Moderate Density
- Medium Density Residential
- Planned Unit Development
- General Recreational

Littlejohn

Neighborhood Site Mapping



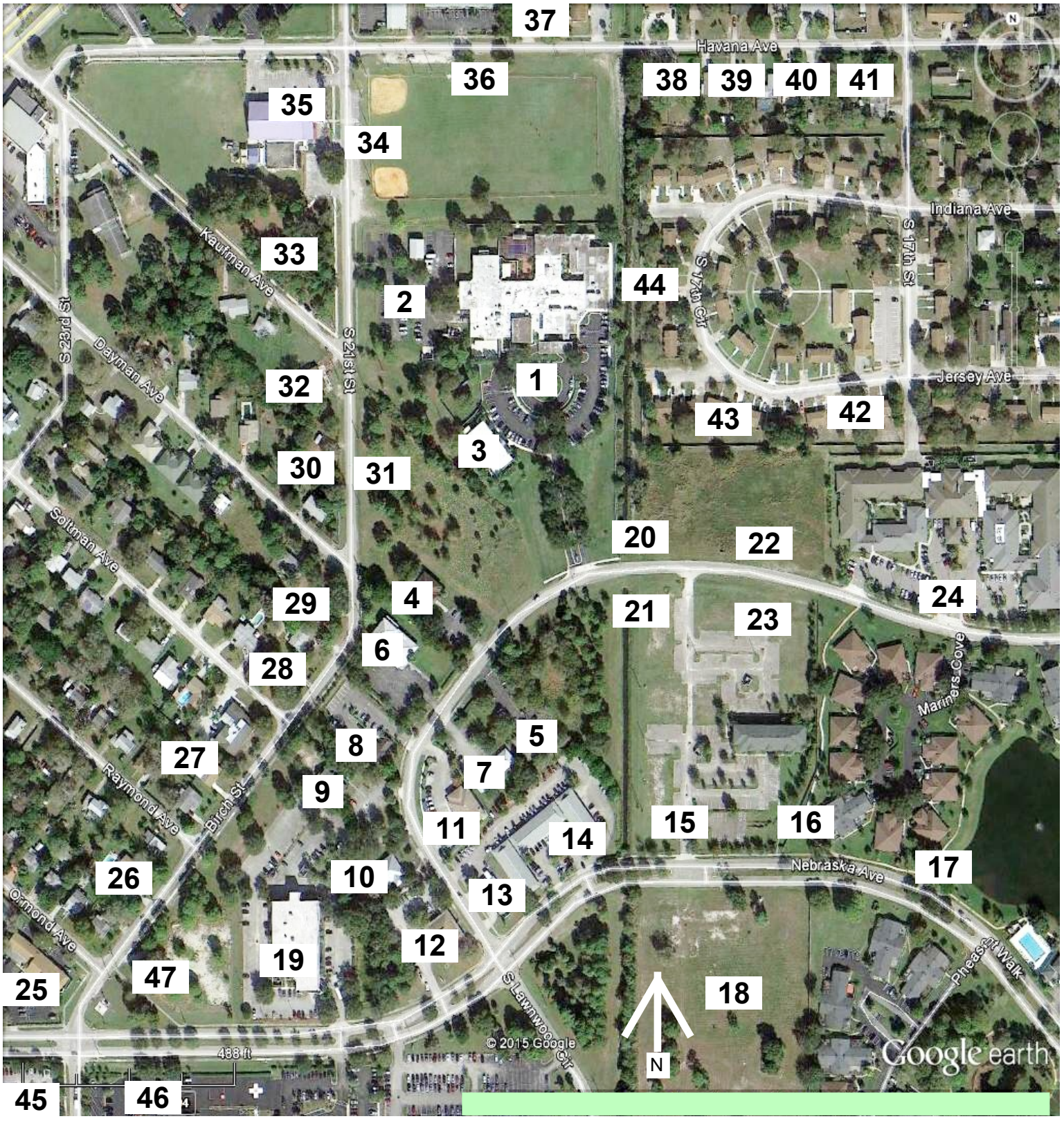
LAWNWOOD MEDICAL CENTER
PHYSCIAL REHABILITATION EXPANSION

1860 N. Lawnwood Circle, Fort Pierce, Fl. 34950

May 14, 2015

Moody Nolan Architects

LAWNWOOD MEDICAL CENTER
PHYSICAL REHABILITATION EXPANSION



1860 N. Lawnwood Circle, Fort Pierce, Fl. 34950

Neighborhood Site Map



Shot #1a

Description:
South or front Elevation of Lawnwood Physcial Rehabilitation
1860 N. Lawnwood Circle

Dialogue:
Proposed addition to the right side or east.



Shot # 1b

Description:
East Elevation

Dialogue:
Proposed addition to match existing.



Shot # 1c

Description:
Existing partial South Elevation further to the west

Dialogue:
Proposed addition mechanical screening to match height of existing gym. Screen material to allow air movement.



Shot # 2a

Description:
West side of existing Rehab

Dialogue:
Tends to be the service side



Shot # 2b

Description:
West side service area

Dialogue:
General area of new Electric Rooms, Emergency Generator enclosure and new Bulk Oxygen Tank and its enclosure.



Shot # 3

Description:
Pavillion Conference Center & Education Services

Dialogue:
Shares same parking lot.
No Work.



Shot # 4

Description
Physician Office

Dialogue



Shot # 5

Description
Physician Office

Dialogue



Shot # 6

Description
Physician Office

Dialogue



Shot # 7

Description
Physician Office

Dialogue



Shot # 8

Description
Physician Office

Dialogue



Shot # 9

Description
Physician Office

Dialogue



Shot # 10

Description
Physician Office

Dialogue



Shot # 11

Description
Physician Office

Dialogue



Shot # 12

Description
Physician Office

Dialogue



Shot # 13

Description
Physician Office

Dialogue



Shot # 14

Description
Physician Office

Dialogue



Shot # 15

Description
Abandon Housing

Dialogue



Shot # 16

Description
Private Residence

Dialogue



Shot # 17

Description
Private Residence

Dialogue



Shot # 18

Description
Open Field

Dialogue



Shot # 19

Description
Office Building

Dialogue



Shot # 20

Description
Open Field

Dialogue



Shot # 21

Description
Open Field

Dialogue



Shot # 22

Description
Open Field

Dialogue



Shot # 23

Description
Abandon Housing (backside)

Dialogue



Shot # 24

Description
Office Building

Dialogue



Shot # 25

Description
Office Building

Dialogue



Shot # 26

Description
Private Residence

Dialogue



Shot # 27

Description
Private Residence

Dialogue



Shot # 28

Description
Private Residence

Dialogue



Shot # 29

Description
Private Residence

Dialogue



Shot # 30

Description
Private Residence

Dialogue



Shot # 31

Description
Open Field (future hospital Parking Lot)

Dialogue



Shot # 32

Description
Park and Housing beyond

Dialogue



Shot # 33

Description
Park

Dialogue



Shot # 34

Description

Park with Lawnwood Rehab beyond

Dialogue



Shot # 35

Description

Recreational Center

Dialogue



Shot # 36

Description

Park with Lawnwood Rehab beyond

Dialogue



Shot # 37

Description
Apartment Complex

Dialogue



Shot # 38

Description
Private Residence

Dialogue



Shot # 39

Description
Private Residence

Dialogue



Shot # 40

Description
Private Residence

Dialogue



Shot # 41

Description
Private Residence

Dialogue



Shot # 42

Description
Duplex Private Residences

Dialogue



Shot # 43

Description

Duplex Private Residences

Dialogue



Shot # 44

Description

Duplex Private Residences

Dialogue



Shot # 45

Description

Lawnwood Medical Center ED (North)

Dialogue



Shot # 45b

Description
Lawnwood Medical Center Front Elevation (West)

Dialogue



Shot # 46

Description
Doctor's Office Building Adjacent to LMC (North)

Dialogue



Shot # 47

Description
Open Field

Dialogue

Littlejohn

May 5, 2015

Ms. Rebecca Grohall
City of Fort Pierce
100 N. U.S. Highway 1
Fort Pierce, Florida 34950

RE: Lawnwood Pavilion Rehabilitation Center Addition – Site Analysis & Design Intent
Project No. 20150322

Dear Ms. Grohall:

The following includes the site analysis study as well as a narrative describing the design intent of the project site.

Site Analysis

The Lawnwood Pavilion is located two blocks north of the Lawnwood Regional Medical Center (LWRMC) and includes a 58 bed physical rehabilitation center and a 5,536 square foot medical office building. The physical rehabilitation center is oriented to the south, while the medical office building is oriented to the northeast, both facing the parking lot. Access to the site is provided via two driveways, connecting to North Lawnwood Circle and South 21st Street. Each driveway provides access to a parking lot; however, there is no vehicular access between parking lots. There are no buffers required for this site, although building setbacks of 25' (front yard) and 15' (side/rear yard) are required. Due to the distance from North Lawnwood Circle and mature trees along the entrance driveway, there is low visibility of the physical rehabilitation center from the main entrance. The site features many native oak trees, palmettos, and royal palms. There is a CMU wall along the east and north property lines which buffer the site from the adjacent properties and uses.

Project Design Intent

LWRMC has experienced significant growth in the last few years in response to the population growth in St. Lucie County. A major milestone has been the hospital receiving designation as a Regional Level II Trauma Center. This growth in patient services has been mirrored at the Physical Rehabilitation Center located two blocks north of the main hospital and results in the facility operating at full capacity much of the year. The hospital undertook an analysis of the immediate catchment area for the hospital and capacities for other facilities offering similar physical rehabilitation services and found there is unmet need. The hospital applied for and received approval from the Florida Agency for Healthcare Administration to add 10 additional beds to their current 58 bed facility. The project consists of an addition to the existing building for the 10 beds with shell space for 6 future beds as well as limited renovations to the existing building adjacent to the addition.

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Nashville | Chattanooga | Decatur | Huntsville | Knoxville | Orlando | Phoenix | Tampa Bay | Tri-Cities

www.leainc.com

Engineering
Planning
Landscape Architecture
Land Surveying
Environmental Services
Health and Safety
Economic Development

The design intent is to provide the addition in the same building height and character as the existing Rehabilitation Center. The existing building is stucco in a honey colored tone with brown windows and doors similar to many of the adjacent properties buildings and we will continue this on the new addition. To keep with the character of the existing landscaping, Florida Royal Palm Trees, Southern Live Oaks, and Tuskegee Crape Myrtles are proposed on the project site.

Surrounding Built Environment and Adjacent Property Evaluation

The surrounding neighborhood is a mix of Medical Office Buildings housed in converted residential buildings to the south and on the other three sides of the property there are residential buildings which are mostly single story and single family but a few are two story and multifamily structures. We have included with our submittal a location plan and photographs of all buildings on our property and adjacent properties. All buildings on our property or adjacent are less than 50 years old and there are no historic structures. The character is a range stucco and siding walls as well as flat and sloped roofs. Lawnwood Rehabilitation Center is one of the highest character and best kept properties in this area. The east side of our property is adjacent to the canal/drainage ditch which has residential properties east of it. A City Park with ball fields borders on the north side of our property.

Sincerely,

George Huddleston
Project Manager

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION

LOCATED IN:

FORT PIERCE, FLORIDA

PARCEL ID # 2416-504-0199-030-0

PLANNING BOARD SUBMITTAL
MAY 29, 2015

CONSULTANTS

CIVIL ENGINEER & LANDSCAPE ARCHITECT
LITTLEJOHN ENGINEERING ASSOCIATES, INC.
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ORLANDO, FLORIDA 32804
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FORT PIERCE, FLORIDA 34981
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ARCHITECT
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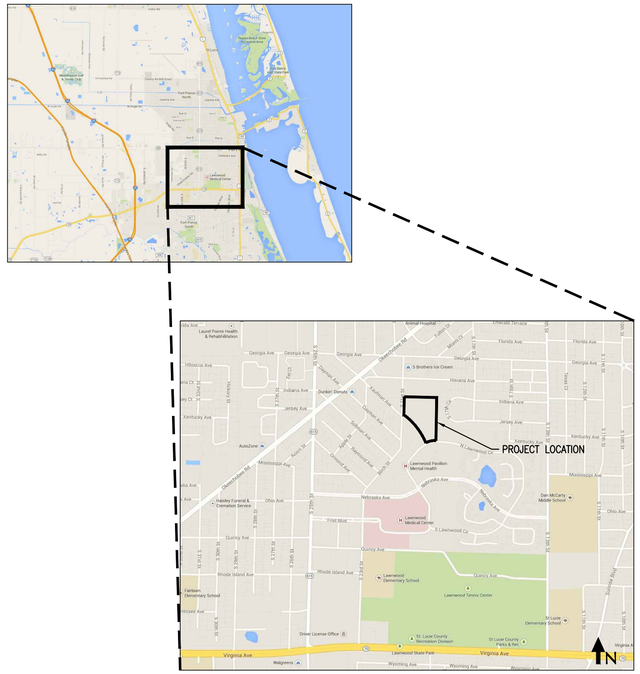
300 SPRUCE STREET, SUITE 300
COLUMBUS, OHIO 43215
P: (614) 461-4664; F: (614) 280-8881

MEP ENGINEER
I.C. THOMASSON ASSOCIATES, INC.
2950 KRAFT DRIVE, SUITE 500
NASHVILLE, TENNESSEE 37204
P: (615) 346-3400; F: (615) 346-3550

GEOTECHNICAL ENGINEER
UNIVERSAL ENGINEERING SERVICES, INC.
820 BREVARD AVENUE
ROCKLEDGE, FLORIDA 32955
P: (321) 638-0808



VICINITY MAP
N.T.S.

OWNER

LAWNWOOD REGIONAL MEDICAL CENTER, INC.
PO BOX 1504
NASHVILLE, TENNESSEE 37205
P: (772) 461-4000
SIGNATORY: GREG LOWE, VICE PRESIDENT
CONTACT: DARRYL DEYOUNG, DIRECTOR OF ENGINEERING
E-MAIL: DARRYL.DEYOUNG@HCAHEALTHCARE.COM

APPLICANT / REPRESENTATIVE

LITTLEJOHN ENGINEERING ASSOCIATES, INC.
1615 EDGEWATER DRIVE, SUITE 180
ORLANDO, FLORIDA 32804
P: (407) 975-1273
F: (407) 975-1279
CONTACT: GEORGE HUDDLESTON, P.E.
E-MAIL: GHUDDLESTON@LEAINC.COM

PROJECT INFORMATION

PROJECT DESCRIPTION:	13,412 SF ADDITION TO AN EXISTING PHYSICAL REHABILITATION CENTER.
LEGAL DESCRIPTION:	SEE SHEET C1.0, EXISTING CONDITIONS
SITE DATA:	SEE SHEET C2.0, NOTES

INDEX OF SHEETS

SHEET NO.	SHEET NAME
C1.0	EXISTING CONDITIONS
C2.0	NOTES
C3.0	EROSION CONTROL PLAN
C3.1	EROSION CONTROL DETAILS
C4.0	DEMOLITION PLAN
C5.0	SITE LAYOUT PLAN
C6.0	GRADING, DRAINAGE & UTILITY PLAN
C7.0 - C7.1	DETAILS
C7.2	FPUA DETAILS
L1.0	LANDSCAPE PLAN
L2.0	LANDSCAPE DETAILS
I1.0	IRRIGATION PLAN
I2.0 - I2.1	IRRIGATION DETAILS
A200 - A300	EXTERIOR ELEVATIONS
ES01	ELECTRICAL - SITE PLAN

Littlejohn
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George B. Huddleston, III P.E. 75608
Edward A. Browder PLA LA6666790
Florida Firm Registration No. 28050

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
FORT PIERCE, FLORIDA

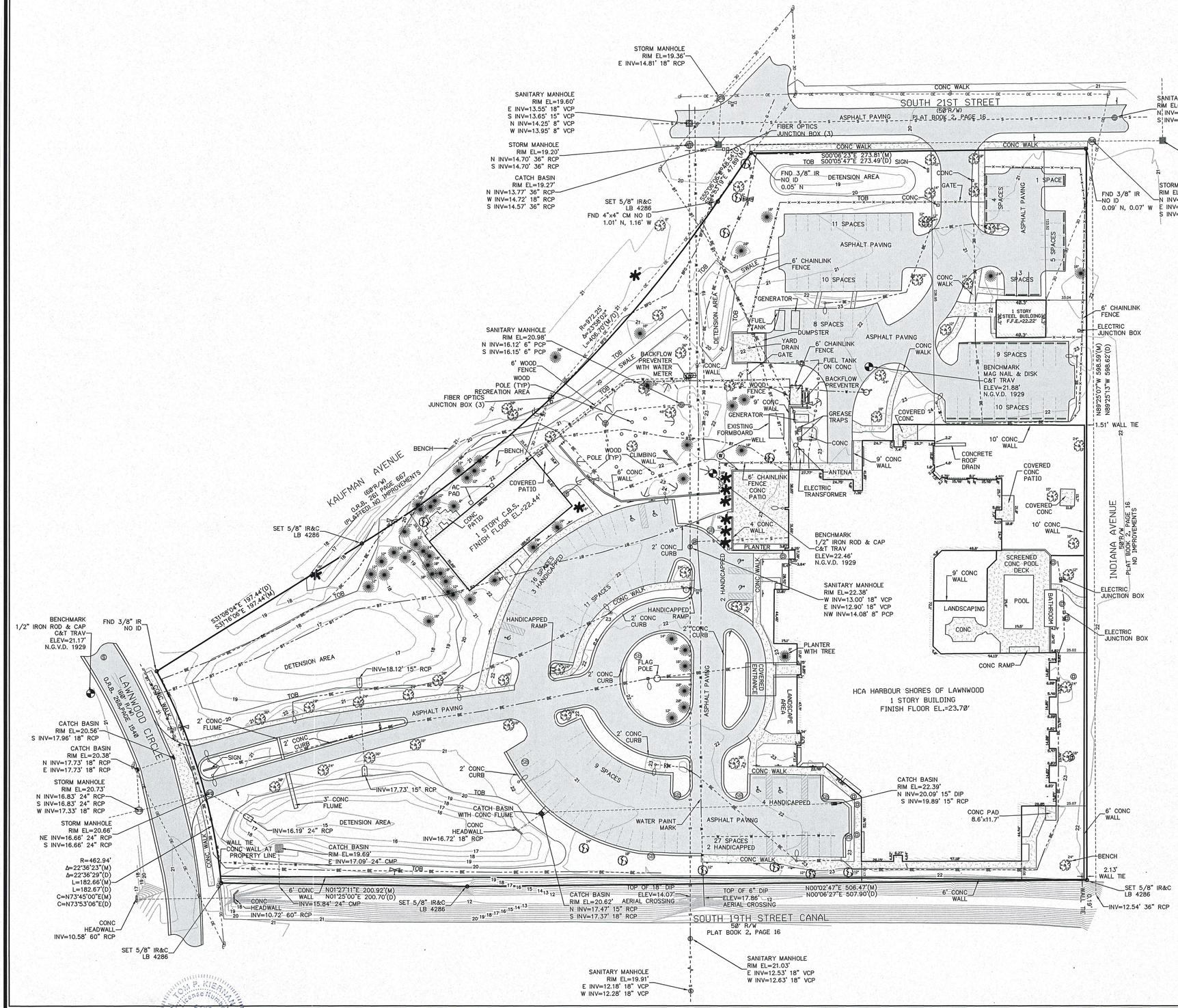
LAWNWOOD PHYSICAL REHABILITATION CENTER

GEORGE BEESLEY HUDDLESTON, III
LICENSE
No. 75608
STATE OF FLORIDA
PROFESSIONAL ENGINEER
5/29/15

DATE	REVISIONS
5/6/2015	20150322

C0.0
COVER SHEET

G:\Projects\2015\20150322\dwg\Construction\20150322_C0-0_COV.dwg-C0-0 Cover_Construction May 28, 2015 - 5:36pm ianderson



NORTH

GRAPHIC SCALE
40 0 20 40
(IN FEET)
1 inch = 40 ft.

LEGAL DESCRIPTION

A PART OF LAWNWOOD ADDITION AS RECORDED IN PLAT BOOK 2, PAGE 16, ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS

BEGIN AT THE NORTHWEST CORNER OF BLOCK 25; THENCE S00°05'47"E ALONG THE WEST LINE OF BLOCK 25 AND ALONG THE EAST RIGHT OF WAY OF SOUTH 21ST STREET A DISTANCE OF 273.49 FEET TO THE EXISTING NORTHERLY RIGHT OF WAY OF A 60.00 FOOT RIGHT OF WAY AS RECORDED IN OFFICIAL RECORDS BOOK 261, PAGE 667, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; THENCE S55°06'06"E ALONG SAID RIGHT OF WAY A DISTANCE OF 46.54 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE TO THE SOUTHWEST, SAID CURVE HAVING A RADIUS OF 972.25 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 23°58'02" A DISTANCE OF 406.70 FEET; THENCE S31°08'04"E ALONG SAID RIGHT OF WAY A DISTANCE OF 197.44 FEET TO THE NORTHERLY RIGHT OF WAY OF A 60.00 FOOT RIGHT OF WAY FOR "LAWNWOOD CIRCLE NORTH" AS RECORDED IN OFFICIAL RECORD BOOK 268, PAGE 1540 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, SAID POINT BEING ON THE ARC OF A CURVE CONCAVE TO THE SOUTH, HAVING A RADIUS OF 462.94 FEET, WHOSE CHORD BEARS N73°53'06"E; THENCE EASTERLY ALONG SAID CURVE AND ALONG SAID RIGHT OF WAY THROUGH A CENTRAL ANGLE OF 22°36'29" A DISTANCE OF 182.67 FEET TO THE WEST LINE OF A 50.00 FOOT WIDE DRAINAGE RIGHT OF WAY FOR SOUTH 19TH STREET CANAL; THENCE N01°25'00"E ALONG SAID RIGHT OF WAY A DISTANCE OF 200.70 FEET TO THE SOUTH SIDE OF A VACATED 16.00 FEET ALLEY RUNNING THROUGH BLOCK 30; THENCE N00°06'27"E, CONTINUING ALONG SAID DRAINAGE RIGHT OF WAY AND ALONG THE EAST LINE OF BLOCK 25 A DISTANCE OF 507.90 FEET TO THE NORTHEAST CORNER OF BLOCK 25; THENCE N89°25'13"W A DISTANCE OF 598.62 FEET TO POINT OF BEGINNING.

SUBJECT TO EASEMENTS, RIGHTS OF WAY OR RESERVATIONS OF PUBLIC RECORD,

NOTES:

1) Not valid without the signature and the original raised seal of a Florida Licensed Surveyor and Mapper.
2) Description shown hereon provided by the client and/or their agent.
3) The last date of field work was April 23, 2015.
4) Overall parcel contains 7.539 Acres, more or less.
5) Lands shown hereon were not abstracted by this office for right-of-ways, Reservations, Agreements, and/or Easements of Record. Such information should be obtained and confirmed by others through appropriate title verification.
6) Elevations shown hereon are based on the North rim of a catch basin having a elevation of 20.87 feet based on the National Geodetic Vertical Datum (N.G.V.D.) of 1929.
7) Bearings shown hereon are relative to the East right-of-way line of South 21st Street having a bearing of S00°06'23"E.
8) Underground utilities, utility services, foundations and improvements were not located as a part of this survey.
9) Said described property is located within an area having a Flood Zone Designation "X", on Flood Rate Map No.12111C0186 J with a date of identification of February 16, 2012, in St. Lucie County, State of Florida, which is the current Flood Insurance Rate Map for the community in which said premises is situated.
10) Additions or deletions to survey maps or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.

LEGEND

℄	DENOTES CENTERLINE
(M)	DENOTES FIELD MEASUREMENTS
(D)	DENOTES DEED DATA
TOB	DENOTES TOP OF BANK
TYP	DENOTES TYPICAL
FND	DENOTES FOUND
LB	DENOTES LICENSED BUSINESS
OE	DENOTES OVERHEAD UTILITIES
UE	DENOTES UTILITY EASEMENT
PLS	DENOTES PROFESSIONAL LAND SURVEYOR
IP	DENOTES IRON PIPE
IR	DENOTES IRON ROD
CM	DENOTES CONCRETE MONUMENT
CONC	DENOTES CONCRETE
IR&C	DENOTES 5/8" IRON ROD & CAP
Δ	DENOTES CENTRAL ANGLE
R	DENOTES RADIUS
L	DENOTES ARC LENGTH
ORB	DENOTES OFFICIAL RECORDS BOOK
±	DENOTES PLUS OR MINUS
No.	DENOTES NUMBER
PK&D	DENOTES P.K. NAIL AND DISK
CMP	DENOTES CORRUGATED METAL PIPE
RCP	DENOTES REINFORCED CONCRETE PIPE
No ID	DENOTES NO IDENTIFICATION NUMBER
PRM	DENOTES PERMANENT REFERENCE MONUMENT
	DENOTES FIRE HYDRANT
	DENOTES ELEVATION (TYPICAL)
WM	DENOTES WATER METER
	DENOTES OAK TREE
	DENOTES PINE TREE
	DENOTES PALM TREE
	DENOTES EXOTIC TREE
	DENOTES SOIL BORING
	DENOTES SANITARY CLEANOUT
	DENOTES STREET LIGHT
	DENOTES GUY ANCHOR
	DENOTES SIGN
S	DENOTES SANITARY MANHOLE
	DENOTES STORM MANHOLE
	DENOTES IRRIGATION VALVE
BT	DENOTES BELLSOUTH PAINT MARK
BE	DENOTES FP&L PAINT MARK
W	DENOTES WATER PAINT MARK
S	DENOTES SANITARY PIPE
G	DENOTES GAS PAINT MARK

C1.0
EXISTING CONDITIONS

THOMAS P. KIERNAN
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATE NO. 6199
STATE OF FLORIDA

5/4/15
SIGNATURE DATE

COMPUTER FILE REF.	FIELD BK./PG.
15-054 map.dwg	

CULPEPPER & TERPENING, INC
CONSULTING ENGINEERS | LAND SURVEYORS
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
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151 SW FLAGLER AVENUE • STUART, FLORIDA 34994
PHONE 772-220-3376 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA CERTIFICATION No. LB 4286

- REVISIONS -	BY	DATE
ADDED SANITARY MANHOLE, SANITARY & WATER LINE LOCATION	GLM	4-24-15

	BY	DATE
FIELD	GA	4-7-15
CALCS.		
DRAWN	GLM	4-7-15
DETAILED		
CHECKED		
APPROVED		

BOUNDARY SURVEY

PREPARED FOR

LITTLEJOHN ENGINEERING ASSOCIATES

DATE: 4-07-2015
HORIZ. SCALE: 1"=40'
VERT. SCALE: N\A
JOB No. 15-054
SHEET 1 OF 1

GENERAL NOTES

1. BASE INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY CULPEPPER & TERPENING, INC. ON 5/5/2015. LITTLEJOHN ENGINEERING ASSOCIATES AND ANY OF THEIR CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.
2. THE SITE LAYOUT IS BASED ON REFERENCE POINTS AS NOTED.
3. THE CONTRACTOR SHALL CHECK ALL EXISTING CONDITIONS, (i.e. INVERTS, UTILITY ROUTINGS, UTILITY CROSSINGS, AND DIMENSIONS) IN THE FIELD PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE ENGINEER.
4. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL CALL NATIONAL ONE CALL (811) 72 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION.
5. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND RECEIVE APPROVAL WHERE NECESSARY BEFORE CONSTRUCTION.
6. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. SLIGHT FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY.
7. DIMENSIONS ARE TO FACE OF CURB AND/OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
8. CONCRETE FOR SIDEWALKS SHALL BE 3500 PSI CONCRETE.
9. ANY WORK UNACCEPTABLE TO THE OWNER'S REPRESENTATIVE OR TO THE CITY OF FORT PIERCE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
10. ACCESSIBLE RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1:12. GRADES WITHIN ACCESSIBLE SPACES SHALL BE MAXIMUM 2% IN ALL DIRECTIONS.
11. THE PROPOSED BUILDING SHALL BE LAID OUT UTILIZING THE EXISTING STRUCTURE AS A CONTROL POINT AND THE ARCHITECTURAL DRAWINGS. DIMENSIONS SHOWN TO THE PROPOSED BUILDING ARE CALCULATED TO THE FACE OF EXTERIOR WALL. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
12. CURBS SHALL BE PARALLEL TO THE CENTERLINE OF DRIVES. THE CURB SHALL BE PLACED ONLY AFTER HAVING ALL BREAK POINTS (PC & PT OF CURVES) LOCATED AT THE FACE OF CURB OR AT A CONSISTENT OFFSET BY A REGISTERED LAND SURVEYOR.
13. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE MANUAL OF ACCIDENT PREVENTION AND CONSTRUCTION ISSUED BY AGC OF AMERICA, INC. AND THE SAFETY AND HEALTH REGULATIONS OF CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.
14. THE CONTRACTOR SHALL PAVE IN THE DIRECTION OF TRAFFIC.
15. THE CONTRACTOR SHALL COLD PLANE IN THE DIRECTION OF TRAFFIC.
16. THE CONTRACTOR WILL BE REQUIRED TO ADJUST GRADES OF INTERSECTING STREETS, ALLEYS, PUBLIC ENTRANCES AND PRIVATE DRIVES AS DIRECTED BY THE ENGINEER.
17. ALL ROADWAY AND SIDEWALK CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF CITY OF FORT PIERCE.
18. ALL CONSTRUCTION MATERIALS AND INSTALLATION SHALL CONFORM TO CITY OF FORT PIERCE AND STATE DOT REGULATIONS AND SPECIFICATIONS.
19. ALL CURBING WILL BE REQUIRED TO ADJUST TO THE GRADES OF INTERSECTING STREETS, ALLEYS, PUBLIC ENTRANCES, AND PRIVATE DRIVES AS DIRECTED BY THE ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE MANUAL OF ACCIDENT PREVENTION AND CONSTRUCTION ISSUED BY AGC OF AMERICA, INC. AND THE SAFETY AND HEALTH REGULATIONS OF CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.

SITE UTILITY NOTES

1. THE SANITARY SEWER SHALL BE OF THE MATERIAL INDICATED ON THE PLAN. POLYVINYLCHLORIDE (PVC) SHALL BE (SDR26).
2. ALL WATER LINES, SEWER LINES, AND APPURTENANCES SHALL BE OF MATERIALS AND CONSTRUCTION THAT CONFORM TO THE FPUA STANDARDS AND DETAILS. PROVIDE A MINIMUM 36" OF COVER OVER ALL WATER LINES.
3. THE CONTRACTOR SHALL MAINTAIN VERTICAL AND HORIZONTAL SEPARATION BETWEEN UTILITIES AND WATER LINES IN ACCORDANCE WITH FORT PIERCE AND FPUA STANDARDS.
4. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATION OF EXISTING MANHOLES OR SANITARY SEWER LINES AT THE POINT OF CONNECTION PRIOR TO THE COMMENCEMENT OF ORDERING OF MATERIALS, CONSTRUCTION OR REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES DO NOT CONFLICT WITH SANITARY SEWERS, SANITARY SEWER SERVICES, STORM SEWERS, OR ANY OTHER UTILITY OR STRUCTURE, EXISTING OR PROPOSED.
6. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
7. BEFORE CONNECTIONS ARE MADE INTO EXISTING UTILITIES, THE NEW LINES ARE TO BE FLUSHED AND TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE FPUA SPECIFICATIONS.
8. ALL TRENCHES CUT IN EXISTING ROADS OR DRIVES SHALL UTILIZE A CLEAN SAW CUT AND SHALL BE BACKFIELD (100%) TO FINAL SUBGRADE WITH #57 STONE. REPAIR ROADS PER LOCAL AGENCY REQUIREMENTS.
9. REPAIR ALL DAMAGE TO EXISTING FEATURES (i.e. DRIVES, ROADS, YARDS, LANDSCAPING, ETC...) TO PRE-CONSTRUCTION CONDITION.
10. THE CONTRACTOR SHALL PROVIDE ALL HORIZONTAL AND VERTICAL BENDS TO ATTAIN THE ALIGNMENT INDICATED ON THE PLANS. PROVIDE VERTICAL BENDS WHERE NECESSARY TO ALLOW WATER LINES TO PASSUNDER OR OVER OTHER UTILITY LINES. (ALL BENDS AND BRACES NEEDED MAY NOT BE ACTUALLY SHOWN). PROVIDE BRACING AND/OR RODDING AT ALL BENDS AND TEES AS REQUIRED BY WATER DEPARTMENT.
11. REDUCED PRESSURE BACKFLOW PREVENTER (RPBP) OR DUAL CHECK WILL BE REQUIRED ON ALL TESTS AND FILL LINES (JUMPER) NEEDED FOR WATER MAIN CONSTRUCTION AND MUST BE APPROVED BY THE FPUA.
12. COORDINATE THE EXACT LOCATION OF ALL UTILITIES ENTERING THE BUILDING WITH THE PLUMBING PLANS.
13. THE CONTRACTOR SHALL VERIFY REQUIRED PIPE LENGTHS. EXISTING PIPE MATERIAL AND SIZES AS SHOWN ON PLANS.
14. REPAIR EXISTING PAVEMENT, CURBS, WALKS, LANDSCAPING, ETC. THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES TO A LIKE NEW CONDITION AT NO ADDITIONAL COST TO THE OWNER.
15. WHERE DRAINAGE OR UTILITY LINES OCCUR IN PROPOSED FILL AREAS, THE FILL MATERIAL IS TO BE PLACED AND COMPACTED PER GEOTECHNICAL ENGINEERS RECOMMENDATION PRIOR TO INSTALLATION OF DRAINAGE OR UTILITY LINES. FILL IS TO BE INSPECTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER TESTING FIRM EMPLOYED BY THE OWNER. RESULTS OF THE TEST SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE. CONTRACTOR TO PAY FOR ANY RETESTING.
16. THE CONTRACTOR SHALL ADJUST THE ALIGNMENT OF THE WATER LINES (HORIZONTALLY AND/OR VERTICALLY) TO ALLOW THE REQUIRED BRACING AT BENDS AND TEES.
17. EXISTING CASTINGS LOCATED IN FILL/CUT AREAS SHALL BE ADJUSTED TO ENSURE THAT THE TOP OF CASTING IS FLUSH WITH THE FINISHED GRADE.
18. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.
19. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS.
20. FIRE HYDRANT ASSEMBLIES INCLUDE THE APPROPRIATE SIZED TEE (WITH KICKER), 6" LINE TO HYDRANT, 6" GATE VALVE (WITH VALVE BOX), AND FIRE HYDRANT (WITH KICKER). HYDRANTS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS.
21. THE CONCRETE CAPS AND ENCASEMENTS ON WATER AND SEWER LINES SHALL BE A MINIMUM OF 6" THICK. USE 3000 PSI CONCRETE.
22. CONTRACTOR SHALL MARK THE LOCATION OF ALL NEW PVC LINES PER FPUA STANDARDS.

DEMOLITION NOTES

1. ALL MATERIALS BEING REMOVED AND NOT RELOCATED UNDER THE NEW CONSTRUCTION, INCLUDING TREES AND SHRUBS, SIGNS, UTILITY STRUCTURES, ETC., SHALL BE FIRST OFFERED TO THE OWNER'S REPRESENTATIVE AND IF NOT ACCEPTED SHALL THEN BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL CHARTED AND UNCHARTED UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
3. THE CONTRACTOR SHALL VERIFY THE LIMITS OF DEMOLITION WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.
4. IN AREAS WHERE EXISTING PAVEMENT, WALKS, OR CURBS ARE TO BE REMOVED, SAW CUT TO PROVIDE A CLEAN EDGE. COORDINATE EXTENT OF PAVEMENT DEMOLITION WITH THE LIMIT OF NEW IMPROVEMENTS ON THE SITE LAYOUT PLAN & UTILITY INSTALLATION.
5. CONTRACTOR SHALL COORDINATE PHASING OF THE DEMOLITION WITH THE OWNER'S REPRESENTATIVE AND CITY OF FORT PIERCE PRIOR TO BEGINNING WORK. DISRUPTION OF EXISTING UTILITY SERVICES AND TRAFFIC PATTERNS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE AND INITIATED ONLY AFTER APPROVAL BY THE CITY OF FORT PIERCE AND THE UTILITY COMPANIES.
6. CAVITIES LEFT BY STRUCTURE REMOVAL SHALL BE SUITABLY BACKFILLED AND COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL USE WATER SPRINKLING AND OTHER SUITABLE METHODS AS NECESSARY TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION WORK.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL NECESSARY TO ACCOMPLISH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
9. THE CONTRACTOR SHALL PRESERVE AND PROTECT SURVEY CONTROL POINTS AND SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY DISTURBED CONTROL POINTS.
10. EXISTING LIGHT STANDARDS BEING REMOVED SHALL BE FIRST OFFERED TO THE OWNER PRIOR TO DISPOSING OF THEM. COORDINATE LIGHTING DEMOLITION AND LAYOUT WITH THE ELECTRICAL DRAWINGS.
11. RELOCATION OF EXISTING PLANT MATERIALS SHALL BE COORDINATED WITH THE OWNER AND RELOCATED TO A DESIGNATED AREA ON SITE.
12. EXISTING TRESS TO BE PRESERVED ARE TO BE BARRICADED BEFORE BEGINNING CONSTRUCTION. IN ACCORDANCE WITH THE TREE PRESERVATION NOTES AND DETAIL ON THE LANDSCAPE PLAN.
13. NO UTILITY OR STORM SEWER LINES SHALL BE DEMOLISHED UNTIL THE NEW LINES HAVE BEEN INSTALLED AND ARE PLACED INTO OPERATION.
14. THE CONTRACTOR SHALL INCORPORATE INTO HIS WORK ANY ISOLATION VALVES OR TEMPORARY PLUGS REQUIRED TO CONSTRUCT NEW UTILITY LINES AND DEMOLISH EXISTING UTILITY LINES.
15. SELECTIVE CLEARING CONSISTING OF REMOVAL OF VINES, SAPLINGS UNDER 1" DIAMETER AND UNDERBRUSH SHALL BE PERFORMED IN TREE PRESERVATION AREAS INTERNAL TO THE PROJECT AND NOTED ON PLANS.
16. WHERE WATER LINE AND SEWER LINE ABANDONMENT IS PLANNED, THE CONTRACTOR MAY ABANDON WATER LINES AND SEWER LINES IN PLACE WHERE THEY OCCUR AT LEAST 24" (TO TOP OF PIPE) BELOW FINAL SUBGRADE ELEVATIONS AND OUTSIDE THE BUILDING FOOT PRINT. ALL UTILITY LINES BEING ABANDONED IN PLACE SHALL HAVE ALL ENDS PERMANENTLY CLOSED USING A CONCRETE PLUG.
17. EXISTING IRRIGATION LINES LIE WITHIN THE AREA AFFECTED BY THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL REWORK THE EXISTING IRRIGATION SYSTEMS IN ACCORDANCE WITH DIRECTIVES NOTED ON THE LANDSCAPE PLAN. SERVICE SHALL BE MAINTAINED DURING CONSTRUCTION TO THE LANDSCAPED AREAS CURRENTLY IRRIGATED.

SITE GRADING & EROSION CONTROL NOTES

1. THE DISTURBED AREA FOR THIS PROJECT IS APPROXIMATELY 1.25± ACRES.
2. THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO COMMUNITY PANEL NO. 12111C0186J OF THE F.E.M.A. FLOOD INSURANCE RATE MAPS FOR FORT PIERCE, FLORIDA, WITH AN EFFECTIVE DATE OF 2/16/12
3. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS.
4. MULCH AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED, UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
6. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
7. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF THE STORM DRAIN CONNECTIONS AT THE BUILDING WITH THE PLUMBING PLANS.
8. THE CONTRACTOR SHALL CHECK ALL EXISTING GRADES AND DIMENSIONS IN THE FIELD PRIOR TO BEGINNING WORK AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
9. THE CONTRACTOR SHALL ADJUST THE CASTINGS OF ALL NEW AND EXISTING STRUCTURES TO MATCH PROPOSED FINISH GRADES.
10. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE MANUAL OF ACCIDENT PREVENTION AND CONSTRUCTION ISSUED BY AGC OF AMERICA, INC. AND THE SAFETY AND HEALTH REGULATIONS OF CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.
11. PROPOSED CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF AN ENGINEERED GRADING DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO DRAINAGE AND MOVEMENT OF MATERIALS. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THE INTENT OR ANY PROBLEM WITH THE CONTINUITY OF GRADES, THE ENGINEER SHALL BE CONTACTED IMMEDIATELY.
12. ALL CUT AND FILL SLOPES SHALL BE 3 HORIZONTAL TO 1 VERTICAL OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS.
13. ALL PIPES UNDER EXISTING PAVED AREAS SHALL BE BACKFILLED TO THE TOP OF SUBGRADE WITH CRUSHED STONE.
14. MINIMUM GRADE ON ASPHALT OR CONCRETE PAVING SHALL BE 1.0%. THE MAXIMUM GRADES WITHIN ACCESSIBLE SPACES SHALL BE 2% IN ANY DIRECTION.
15. CONTRACTOR SHALL CONFORM TO ALL APPLICABLE CODES AND OBTAIN APPROVAL AS NECESSARY BEFORE BEGINNING CONSTRUCTION.
16. ALL EARTHWORK, INCLUDING THE EXCAVATED SUBGRADE AND EACH LAYER OF FILL, SHALL BE MONITORED AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER, OR HIS REPRESENTATIVE.
17. IF ANY SPRINGS OR UNDERGROUND STREAMS ARE EXPOSED DURING CONSTRUCTION PERMANENT FRENCH DRAINS MAY BE REQUIRED. THE DRAINS SHALL BE SPECIFIED AND LOCATED DURING CONSTRUCTION AS REQUIRED BY THE CONDITIONS WHICH ARE ENCOUNTERED, AND SHALL BE APPROVED BY THE ENGINEER.
18. THIS GRADING & DRAINAGE PLAN IS NOT A DETERMINATION OR GUARANTEE OF THE SUITABILITY OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED. A GEOTECHNICAL SOILS REPORT HAS BEEN PREPARED AND IS AVAILABLE FROM THE OWNER. DETERMINATION OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
19. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO COMPACT FILL SUFFICIENTLY AROUND AND OVER ALL PIPES, STRUCTURES, VALVE STEMS, ETC., INSIDE THE PROPOSED PAVED AREAS TO AVOID SETTLEMENT. ANY SETTLEMENT DURING THE WARRANTY PERIOD SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
20. IN NO CASE SHALL SLOPE, HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING TRENCH CONSTRUCTION, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL REGULATIONS, SPECIFICALLY THE CURRENT OSHA HEALTH AND SAFETY STANDARDS FOR EXCAVATIONS (29 CRF PART 1926) SHALL BE FOLLOWED.
21. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
22. STRIP TOPSOIL FROM ALL CUT AND FILL AREAS AND STOCKPILE UPON COMPLETION OF GENERAL GRADING OVER ALL DISTURBED AREAS, TO A MINIMUM DEPTH OF 6". CONTRACTOR SHALL SUPPLY ADDITIONAL TOP SOIL IF INSUFFICIENT QUANTITIES EXIST ON SITE.
23. TOP OF GRATE ELEVATIONS AND LOCATION OF COORDINATES FOR DRAINAGE STRUCTURES SHALL BE AS SHOWN ON THE DETAIL, UNLESS NOTED OTHERWISE. THE GRATES SHALL SLOPE LONGITUDINALLY WITH THE PAVEMENT GRADES.
24. ALL DRAINAGE CONSTRUCTION MATERIALS AND INSTALLATION SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL GOVERNING AGENCY.
25. POSITIVE DRAINAGE SHALL BE ESTABLISHED AS THE FIRST ORDER OF WORK AND SHALL BE MAINTAINED AT ALL TIMES DURING AND AFTER CONSTRUCTION. SOIL SOFTENED BY PERCHED WATER IN FOUNDATION AND PAVEMENT AREAS MUST BE UNDERCUT AND REPLACED WITH SUITABLE FILL MATERIALS APPROVED BY THE GEOTECHNICAL ENGINEER. GROUNDWATER INFILTRATION INTO EXCAVATIONS SHOULD BE EXPECTED, AND THE WATER SHALL BE REMOVED USING GRAVITY DRAINAGE OR PUMPING.
26. REINFORCED CONCRETE STORM DRAINAGE PIPE SHALL BE CLASS III, WALL "B".
27. FILL SLOPES 3:1 AND GREATER SHALL BE PLACED AND COMPACTED 5' BEYOND PROPOSED LIMITS AND THEN EXCAVATED BACK TO THE PROPOSED LOCATION.
28. ALL FILL MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THIS MATERIAL SHALL BE PLACED IN LIFTS DIRECTED BY THE GEOTECHNICAL ENGINEER AND COMPACTED AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
29. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES IS TO BE PLACED AT A SITE APPROVED BY THE ENGINEER. IT SHALL BE TREATED IN A MANNER SO THAT THE AREA AROUND THE DISPOSAL SITE WILL NOT BE CONTAMINATED OR DAMAGED BY THE SEDIMENT IN THE RUN-OFF. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR EARTHWORK. THE CONTRACTOR SHALL OBTAIN THE DISPOSAL SITE AS PART OF THIS WORK.
30. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS.
31. ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
32. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO WASTE EXCESS EARTH MATERIAL OFF SITE AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL FIRST OFFER THE EXCESS MATERIAL TO THE OWNER. IF NOT ACCEPTED BY THE OWNER, THE CONTRACTOR SHALL DISPOSE OF EARTH MATERIAL OFF SITE. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT SUITABLE MATERIAL (AT NO ADDITIONAL COST TO THE OWNER) FOR EARTHWORK OPERATIONS IF SUFFICIENT AMOUNTS OF EARTH MATERIAL ARE NOT AVAILABLE ON SITE.
33. THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY OF THE DETENTION POND DIVERSION DITCH VERIFYING THE REQUIRED VOLUME HAS BEEN PROVIDED AND THAT THE OUTLET CONTROL STRUCTURES MEETS THE DESIGN REQUIREMENTS. THE SURVEY SHALL BE CONDUCTED BY A SURVEYOR LICENSED IN THE STATE OF FLORIDA.

GENERAL INFORMATION

DEVELOPMENT NAME:	LAWNWOOD PHYSICAL REHABILITATION CENTER
PARCEL NUMBERS:	2416-504-0199-030-0
ZONING:	CI
OWNER:	LAWNWOOD REGIONAL MEDICAL CENTER, INC. PO BOX 1504 NASHVILLE, TN 37205
AGENT / ENGINEER:	LITTLEJOHN ENGINEERING ASSOCIATES 1615 EDGEWATER DRIVE, SUITE 180 ORLANDO, FL 32804 P: (407) 975-1273 F: (407) 975-1278 CONTACT : GEORGE HUDDLESTON, III, PE

PROPOSED PROJECT INFORMATION

PROJECT NAME:	LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
SITE ADDRESS:	1860 N. LAWNWOOD CIR
CITY:	FORT PIERCE
COUNTY:	ST. LUCIE
STATE:	FLORIDA
PROPOSED USE:	PHYSICAL REHABILILTATION CLINIC

BUILDING SETBACKS:	MIN.
FRONT YARD:	25'
SIDE YARD:	15'
REAR YARD:	15'

DEVELOPMENT INFORMATION

	ACRES	SQ. FT.
SITE AREA	7.54	328,442

BUILDING COVERAGE

MAX. FLOOR AREA RATIO: 40%

	SQ. FT.	F.A.R.	BEDS
EXISTING REHAB BUILDING	52,375	15.95%	58
EXISTING MOB	5,670	1.73%	N/A
PROPOSED BUILDING	13,412	4.08%	16
TOTAL	71,457	21.76%	74

SITE COVERAGE

MAX. IMPERVIOUS COVER: 80%

	SQ. FT.	ACRES	%
EXISTING BUILDINGS	58,045	1.33	17.67%
EXISTING PARKING	43,966	1.01	13.39%
EXISTING MISC.	6,671	0.15	2.03%
EXISTING SUBTOTAL	108,682	2.49	33.09%
PROPOSED BUILDING	13,412	0.31	4.08%
PROPOSED PARKING	31,410	0.72	9.56%
PROPOSED MISC.	11,339	0.26	3.45%
PROPOSED SUBTOTAL	56,161	1.29	17.10%
TOTAL IMPERVIOUS COVER:	164,843	3.78	50.19%
TOTAL OPEN SPACE	163,599	3.76	49.81%

PARKING

PARKING REQUIREMENT:	1.5 SPACES / BED	
	1 SPACE / 200 SF OF MOB (	
EXISTING BEDS	58	
PROPOSED BEDS	16	
MOB SQUARE FOOTAGE	5670 SF	
REQUIRED PARKING:	139	SPACES
PROVIDED PARKING:	59	STAFF/EMPLOYEE SPACES
	64	PATIENT/VISITOR SPACES
	16	ACCESSIBLE SPACES
	139	TOTAL SPACES

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Nashville I Chattanooga I Decatur I Huntsville I Knoxville I Orlando I Phoenix I Tri-Cities
George B. Huddleston, III P.E. 75608
Edward A. Browder PLA LA6666790
Florida Firm Registration No. 28050

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER
at LAWNWOOD REGIONAL MEDICAL CENTER & HEART INSTITUTE

GEORGE B. HUDDLESTON, III
LICENSE NUMBER
75608
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
5/29/15

DATE	REVISIONS
5/6/2015	20150322

C2.0
GENERAL NOTES

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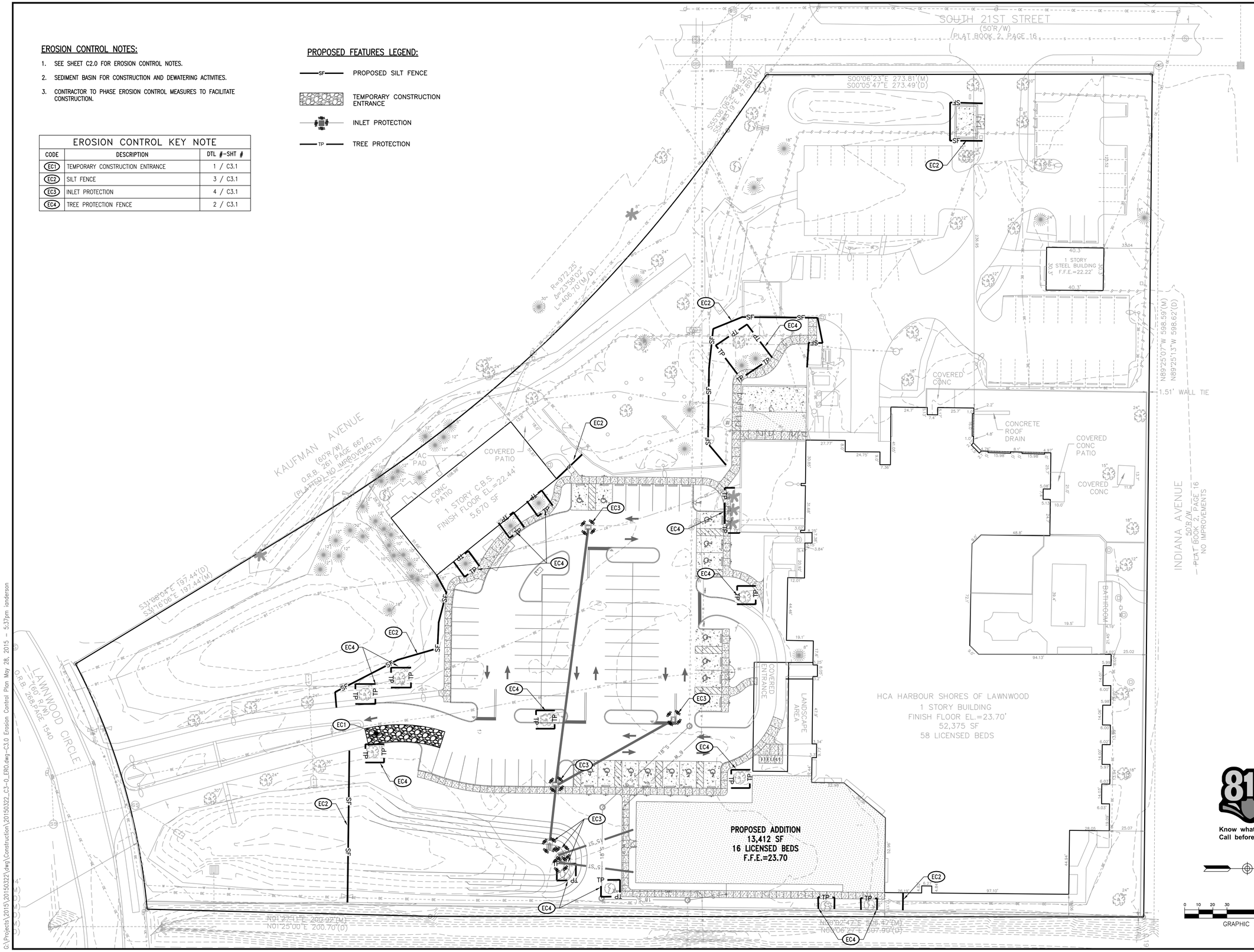
EROSION CONTROL NOTES:

1. SEE SHEET C2.0 FOR EROSION CONTROL NOTES.
2. SEDIMENT BASIN FOR CONSTRUCTION AND DEWATERING ACTIVITIES.
3. CONTRACTOR TO PHASE EROSION CONTROL MEASURES TO FACILITATE CONSTRUCTION.

EROSION CONTROL KEY NOTE		
CODE	DESCRIPTION	DTL #-SHT #
EC1	TEMPORARY CONSTRUCTION ENTRANCE	1 / C3.1
EC2	SILT FENCE	3 / C3.1
EC3	INLET PROTECTION	4 / C3.1
EC4	TREE PROTECTION FENCE	2 / C3.1

PROPOSED FEATURES LEGEND:

- SF — PROPOSED SILT FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- INLET PROTECTION
- TP — TREE PROTECTION



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LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION

FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER
at Lawnwood Regional Medical Center & Heart Institute

STATE OF FLORIDA
LICENSED
PROFESSIONAL ENGINEER
5/29/15

DATE	REVISIONS
5/6/2015	20150322

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

C3.0

EROSION CONTROL PLAN

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5

RESERVED

NOT TO SCALE

3

1. SET POSTS AND EXCAVATE A 4" x 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS



2. STAPLE WIRE FENCNG TO THE POSTS.



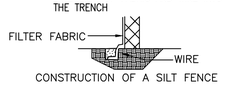
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH



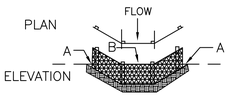
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



EXTENSION OF FABRIC AND WIRE INTO THE TRENCH



CONSTRUCTION OF A SILT FENCE

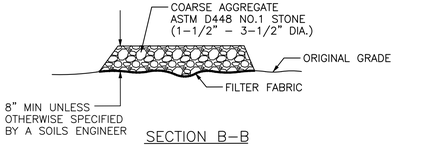


POINT "A" SHOULD BE HIGHER THAN POINT "B" PROPER PLACEMENT OF A FILTER BARRIER IN A DRAINAGE WAY

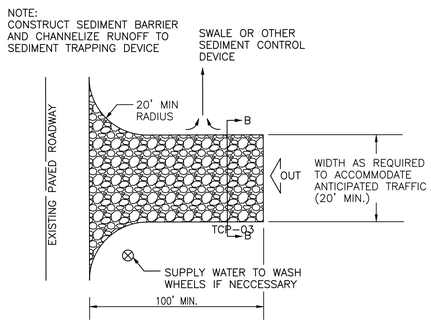
SILT FENCE

NOT TO SCALE

1



SECTION B-B



PLAN VIEW

TEMPORARY CONSTRUCTION ENTRANCE

NOT TO SCALE

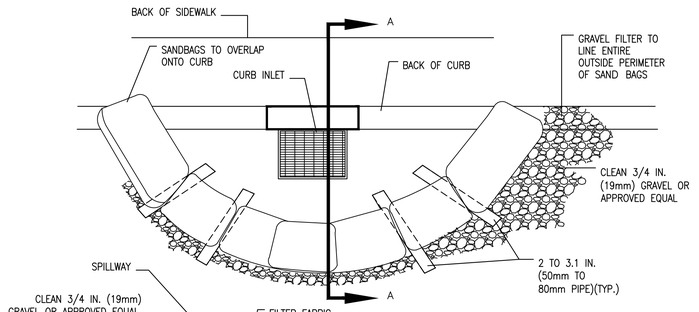
6

RESERVED

NOT TO SCALE

4

NOTES:
1. NOT APPLICABLE IN AREAS WITH HIGH SILTS AND CLAYS WITHOUT FILTER FABRIC.
2. PERIODICALLY REMOVE AND REPLACE GRAVEL. OLD GRAVEL MAY BE USED AS BACKFILL MATERIAL IF APPROVED BY ENGINEER.



SECTION A-A

INLET PROTECTION

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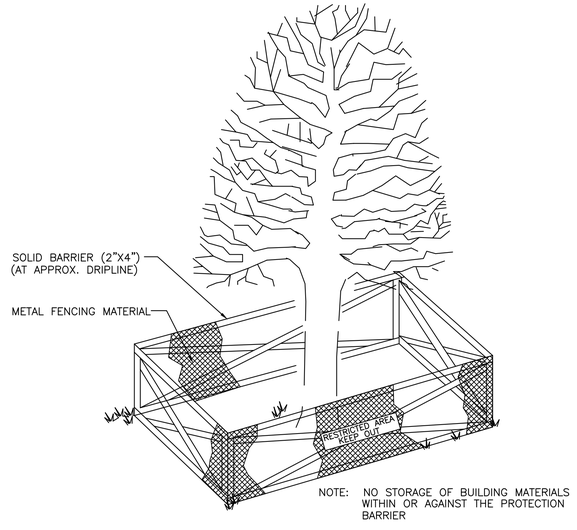
2



NOTE: NO STORAGE OF BUILDING MATERIALS WITHIN OR AGAINST THE PROTECTION BARRIER

TREE PROTECTION

NOT TO SCALE

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LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER
A LAWNWOOD REGIONAL MEDICAL CENTER & HEART INSTITUTE

GEORGE B. HUDDLESTON III LICENSE NUMBER 73608 STATE OF FLORIDA PROFESSIONAL ENGINEER
5/29/15

DATE	REVISIONS
5/6/2015	20150322

C3.1

EROSION CONTROL DETAILS

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DEMOLITION KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
D1	REMOVE EXISTING ASPHALT PAVEMENT	
D2b	REMOVE EXISTING CONCRETE SIDEWALK	
D3	REMOVE EXISTING CURB	
D4	EVENLY SAWCUT	
D6	REMOVE EXISTING DRAINAGE STRUCTURE	
D7	REMOVE EXISTING STORM LINE	
D8	REMOVE EXISTING WATER LINE & APPURTENANCES	
D9	REMOVE EXISTING SANITARY SEWER LINE	
D10	REMOVE EXISTING UTILITY LINE & APPURTENANCES	
D11	EXISTING UTILITY LINE TO BE ABANDONED IN PLACE	
D12	EXISTING FIRE HYDRANT TO BE RELOCATED	
D13	REMOVE EXISTING TREE	
D14	LIMIT OF UTILITY REMOVAL	
D15	REMOVE EXISTING LIGHT POLE	

TREES TO BE REMOVED

SIZE/TYPE	RATIO	REPLACEMENT INCHES
14" TREE	1:1	14"
18" TREE	1:1	18"
18" TREE	1:1	18"
24" TREE	1:1	24"
24" TREE	1:1	24"
TOTAL REPLACEMENT INCHES		98" DBH

TREES TO BE PRESERVED

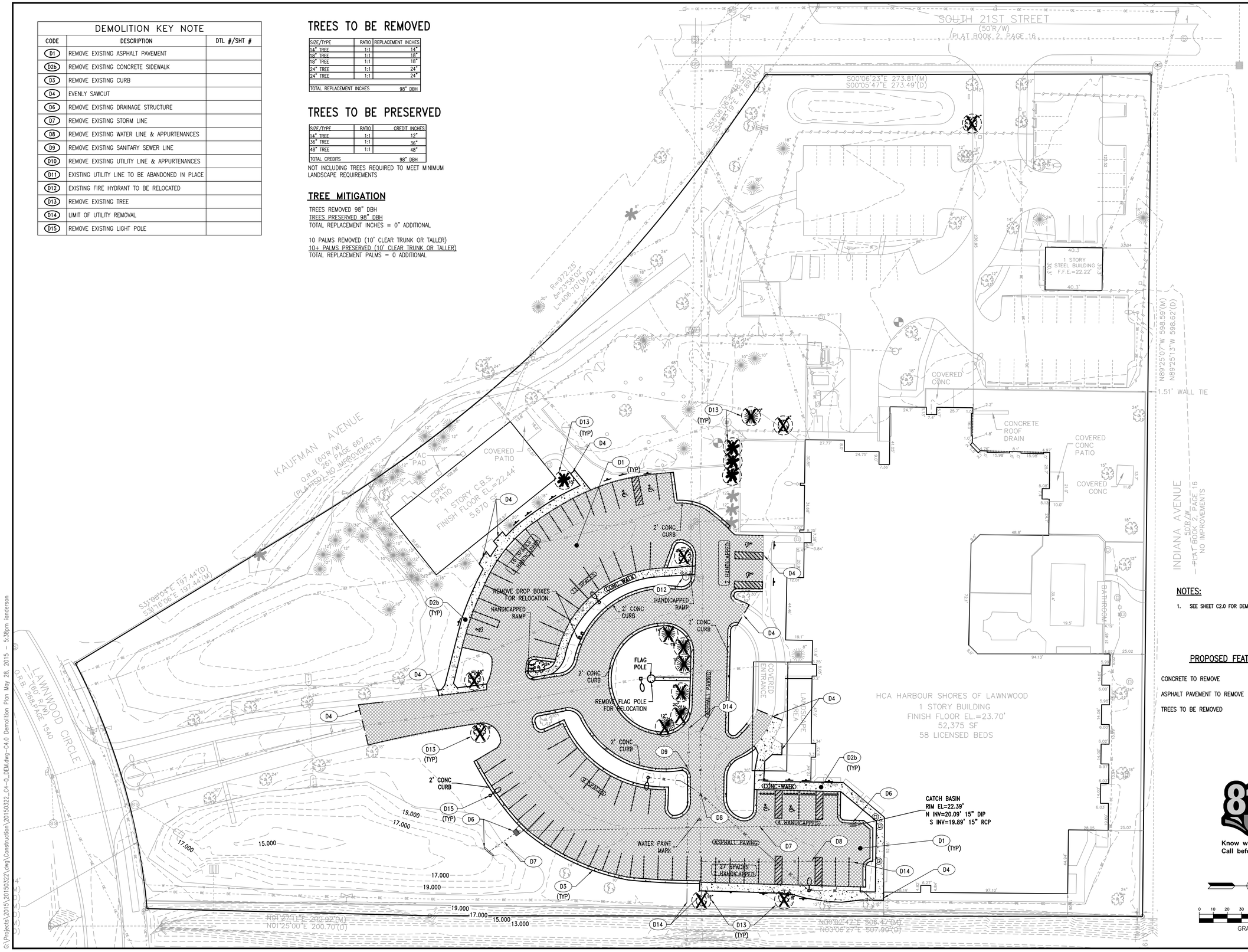
SIZE/TYPE	RATIO	CREDIT INCHES
14" TREE	1:1	12"
36" TREE	1:1	36"
48" TREE	1:1	48"
TOTAL CREDITS		98" DBH

NOT INCLUDING TREES REQUIRED TO MEET MINIMUM LANDSCAPE REQUIREMENTS

TREE MITIGATION

TREES REMOVED 98" DBH
TREES PRESERVED 98" DBH
TOTAL REPLACEMENT INCHES = 0" ADDITIONAL

10 PALMS REMOVED (10' CLEAR TRUNK OR TALLER)
10+ PALMS PRESERVED (10' CLEAR TRUNK OR TALLER)
TOTAL REPLACEMENT PALMS = 0 ADDITIONAL



NOTES:

1. SEE SHEET C2.0 FOR DEMOLITION NOTES.

PROPOSED FEATURES LEGEND

CONCRETE TO REMOVE
ASPHALT PAVEMENT TO REMOVE
TREES TO BE REMOVED

Know what's below.
Call before you dig.

GRAPHIC SCALE
0 10 20 30 60 90

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Edward A. Browder FLA LA6666790
Florida Firm Registration No. 28050

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION

FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER
at LAWNWOOD REGIONAL MEDICAL CENTER & HEART INSTITUTE

STATE OF FLORIDA
EDWARD A. BROWDER
LICENSE NO. 66790
PROFESSIONAL ENGINEER
5/29/15

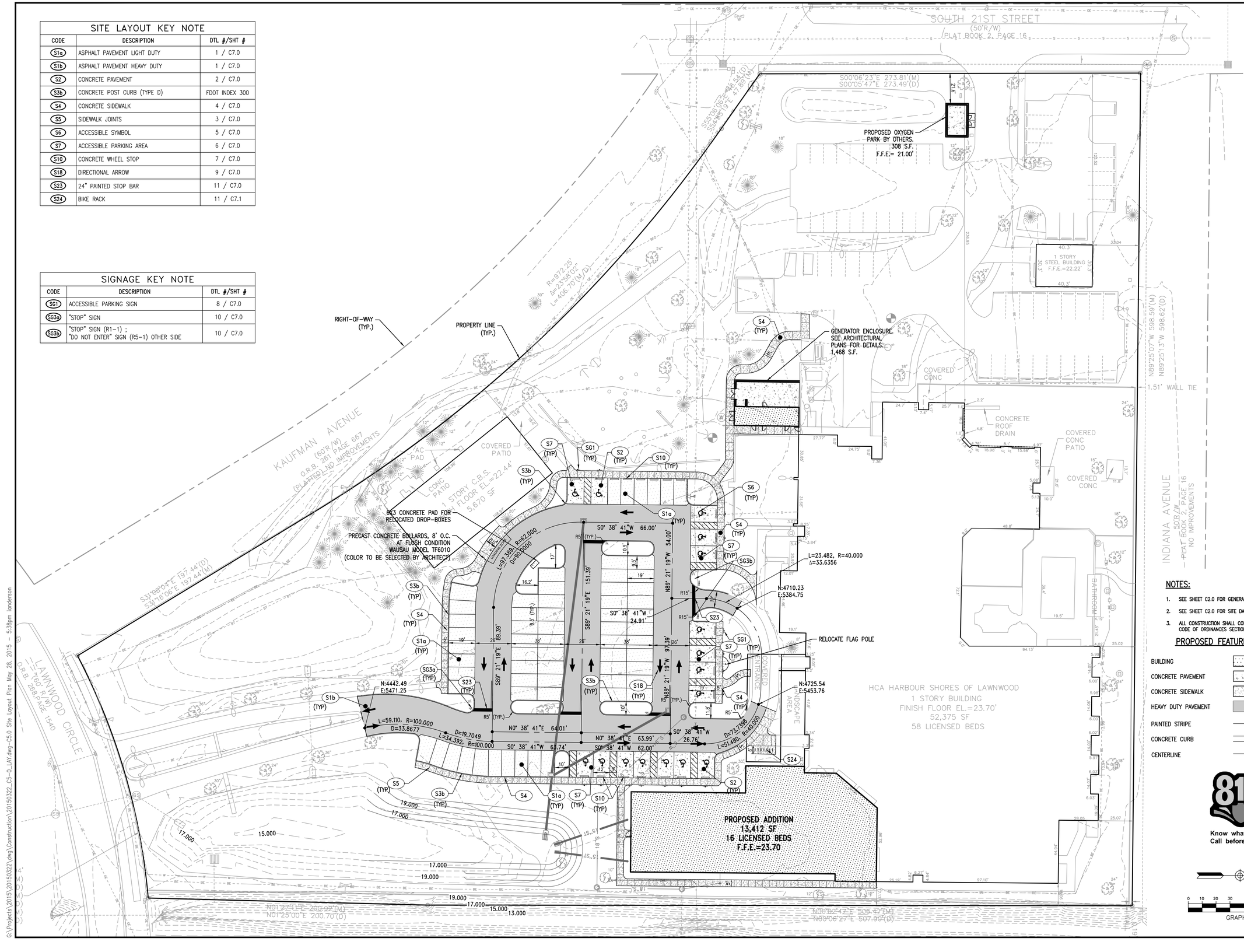
DATE	REVISIONS
5/6/2015	20150322

C4.0
DEMOLITION PLAN

G:\Projects\2015\20150322\dwg\Construction\20150322_C4-0_DEM.dwg-C4.0 Demolition Plan May 28, 2015 - 5:38pm ianderson

SITE LAYOUT KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
S1a	ASPHALT PAVEMENT LIGHT DUTY	1 / C7.0
S1b	ASPHALT PAVEMENT HEAVY DUTY	1 / C7.0
S2	CONCRETE PAVEMENT	2 / C7.0
S3b	CONCRETE POST CURB (TYPE D)	FDOT INDEX 300
S4	CONCRETE SIDEWALK	4 / C7.0
S5	SIDEWALK JOINTS	3 / C7.0
S6	ACCESSIBLE SYMBOL	5 / C7.0
S7	ACCESSIBLE PARKING AREA	6 / C7.0
S10	CONCRETE WHEEL STOP	7 / C7.0
S18	DIRECTIONAL ARROW	9 / C7.0
S23	24" PAINTED STOP BAR	11 / C7.0
S24	BIKE RACK	11 / C7.1

SIGNAGE KEY NOTE		
CODE	DESCRIPTION	DTL #/SHT #
SG1	ACCESSIBLE PARKING SIGN	8 / C7.0
SG3a	"STOP" SIGN	10 / C7.0
SG3b	"STOP" SIGN (R1-1) ; "DO NOT ENTER" SIGN (R5-1) OTHER SIDE	10 / C7.0



NOTES:

1. SEE SHEET C2.0 FOR GENERAL SITE NOTES.
2. SEE SHEET C2.0 FOR SITE DATA NOTES.
3. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 AND 22.

PROPOSED FEATURES LEGEND

- BUILDING
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- HEAVY DUTY PAVEMENT
- PAINTED STRIPE
- CONCRETE CURB
- CENTERLINE

811
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GRAPHIC SCALE
0 10 20 30 60 90

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LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER at Lawnwood Regional Medical Center & Heart Institute

GEORGE B. HUDDLESTON, III LICENSED PROFESSIONAL ENGINEER No. 73608 STATE OF FLORIDA PROFESSIONAL ENGINEER
5/29/15

DATE	REVISIONS
5/6/2015	20150322

C5.0
SITE LAYOUT PLAN

G:\Projects\2015\20150322\dwg\Construction\20150322_C5-0_LAY.dwg-C5.0 Site Layout Plan May 28, 2015 - 5:38pm ianderson

NOTES:

1. SEE SHEET C2.0 FOR GRADING & DRAINAGE NOTES.
2. SEE SHEET C2.0 FOR UTILITY NOTES.
3. ALL ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

PROPOSED FEATURES LEGEND

STORM PIPE & INLET

SPOT ELEVATION + 91.8

PROPOSED CONTOUR 90

DRAINAGE STRUCTURE C3

DOMESTIC SERVICE 8"W

NEW FIRE HYDRANT

SPOT ELEVATION 16.8 TOP OF CURB / 16.3 BASE OF CURB

PROPOSED STORM SEWER PIPE TABLE

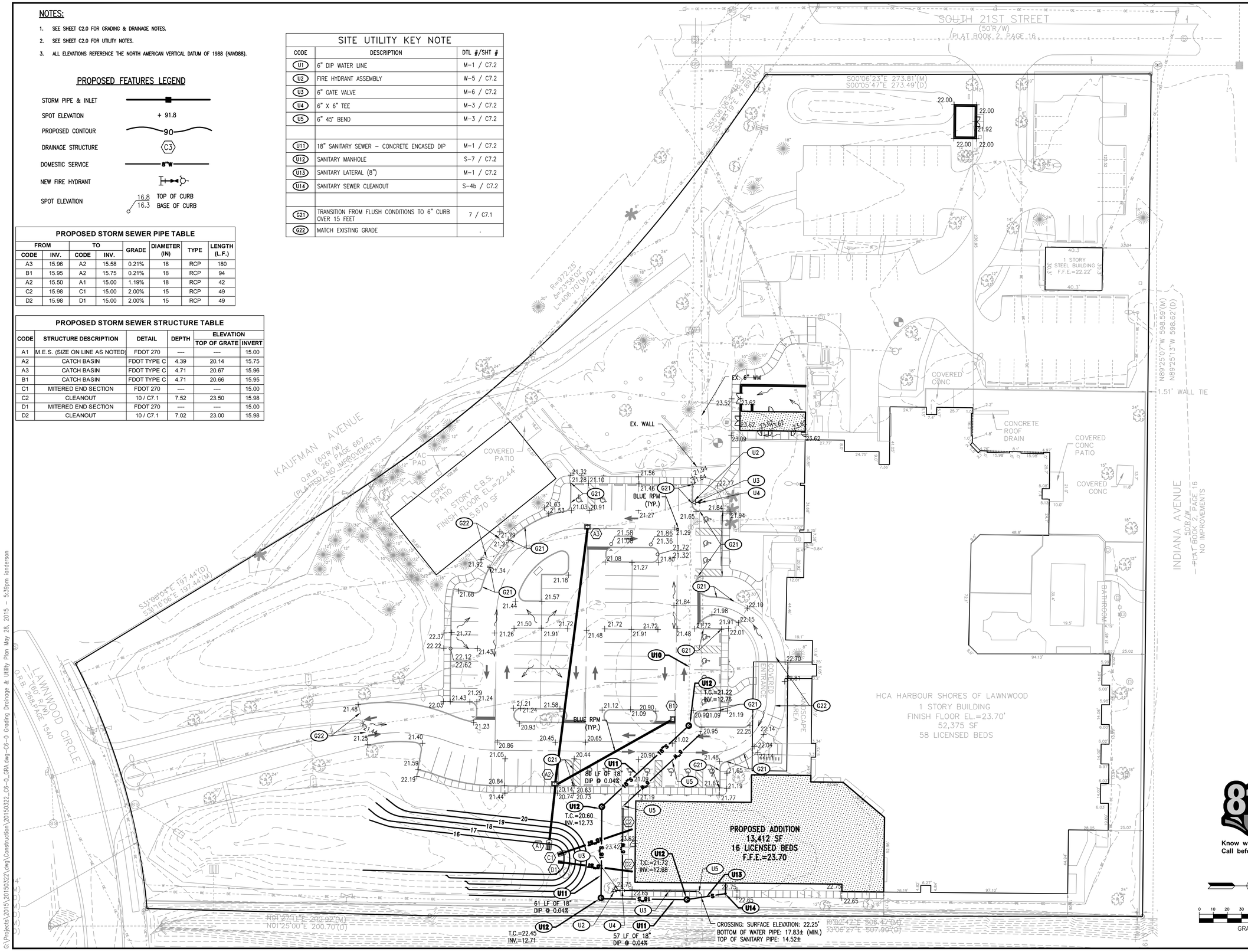
FROM		TO		GRADE	DIAMETER (IN)	TYPE	LENGTH (L.F.)
CODE	INV.	CODE	INV.				
A3	15.96	A2	15.58	0.21%	18	RCP	180
B1	15.95	A2	15.75	0.21%	18	RCP	94
A2	15.50	A1	15.00	1.19%	18	RCP	42
C2	15.98	C1	15.00	2.00%	15	RCP	49
D2	15.98	D1	15.00	2.00%	15	RCP	49

PROPOSED STORM SEWER STRUCTURE TABLE

CODE	STRUCTURE DESCRIPTION	DETAIL	DEPTH	ELEVATION	
				TOP OF GRATE	INVERT
A1	M.E.S. (SIZE ON LINE AS NOTED)	FDOT 270	----	----	15.00
A2	CATCH BASIN	FDOT TYPE C	4.39	20.14	15.75
A3	CATCH BASIN	FDOT TYPE C	4.71	20.67	15.96
B1	CATCH BASIN	FDOT TYPE C	4.71	20.66	15.95
C1	MITERED END SECTION	FDOT 270	----	----	15.00
C2	CLEANOUT	10 / C7.1	7.52	23.50	15.98
D1	MITERED END SECTION	FDOT 270	----	----	15.00
D2	CLEANOUT	10 / C7.1	7.02	23.00	15.98

SITE UTILITY KEY NOTE

CODE	DESCRIPTION	DTL #/SHT #
U1	6" DIP WATER LINE	M-1 / C7.2
U2	FIRE HYDRANT ASSEMBLY	W-5 / C7.2
U3	6" GATE VALVE	M-6 / C7.2
U4	6" X 6" TEE	M-3 / C7.2
U5	6" 45° BEND	M-3 / C7.2
U11	18" SANITARY SEWER – CONCRETE ENCASED DIP	M-1 / C7.2
U12	SANITARY MANHOLE	S-7 / C7.2
U13	SANITARY LATERAL (8")	M-1 / C7.2
U14	SANITARY SEWER CLEANOUT	S-4b / C7.2
G21	TRANSITION FROM FLUSH CONDITIONS TO 6" CURB OVER 15 FEET	7 / C7.1
G22	MATCH EXISTING GRADE	.



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LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION

FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER at LAWNWOOD REGIONAL MEDICAL CENTER & HEART INSTITUTE

STATE OF FLORIDA LICENSED ARCHITECT NO. AR0013601 EDWARD A. BROWDER PROFESSIONAL ENGINEER STATE OF FLORIDA 5/29/15

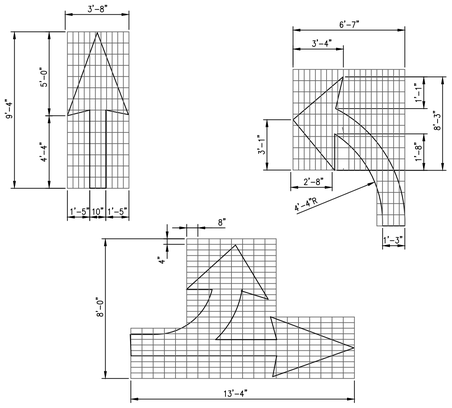
DATE	REVISIONS
5/6/2015	20150322

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

C6.0

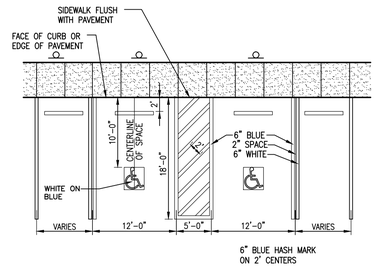
GRADING, DRAINAGE & UTILITY PLAN

G:\Projects\2015\20150322\dwg\Construction\20150322_C6-0_GRA.dwg-C6-0 Grading Drainage & Utility Plan May 28, 2015 - 5:39pm ianderson



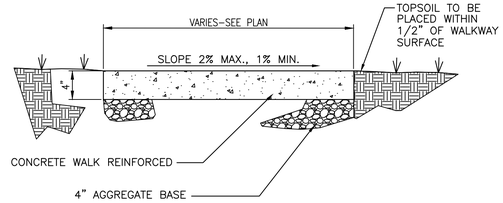
9 ROADWAY DIRECTIONAL ARROWS

NOT TO SCALE

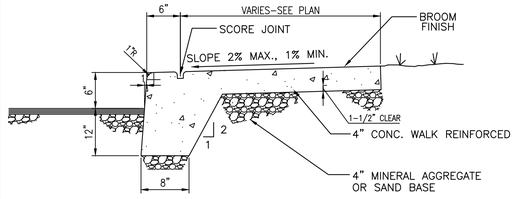


6 FLORIDA ACCESSIBLE PARKING DETAIL

NOT TO SCALE



CONCRETE SIDEWALK IN TURF AREA



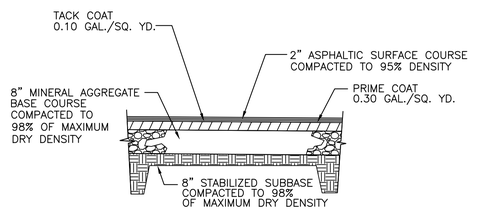
CONCRETE SIDEWALK AT TURN-DOWN CURB

NOTE:
SIDEWALK SECTION AND REINFORCEMENT TO BE PER FDOT INDEX 310 AND FDOT STANDARD SPECIFICATION SECTION 522.

USE 3500 PSI CONCRETE;
PROVIDE CONTROL JOINTS @ 5' CENTERS
PROVIDE EXPANSION JOINTS @ 25' CENTERS
AND WHERE SIDEWALKS ABUT RIGID MATERIAL

4 CONCRETE SIDEWALK

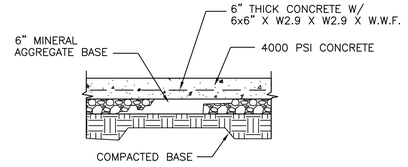
NOT TO SCALE



HEAVY DUTY PAVEMENT

1 PAVEMENT SECTION

NOT TO SCALE



CONCRETE: 4000 PSI
STEEL: GRADE 60

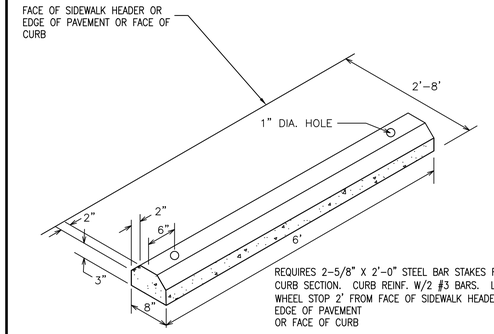
2 CONCRETE PAVEMENT

NOT TO SCALE



10 STOP SIGN

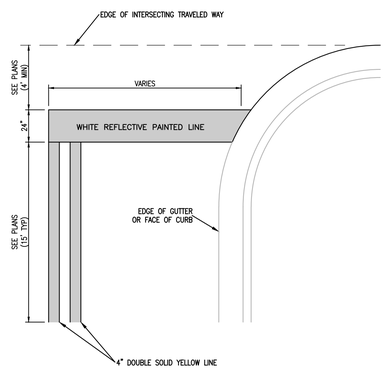
NOT TO SCALE



REQUIRES 2-5/8" X 2'-0" STEEL BAR STAKES FOR EACH CURB SECTION. CURB REINF. W/2 #3 BARS. LOCATE WHEEL STOP 2' FROM FACE OF SIDEWALK HEADER OR EDGE OF PAVEMENT OR FACE OF CURB

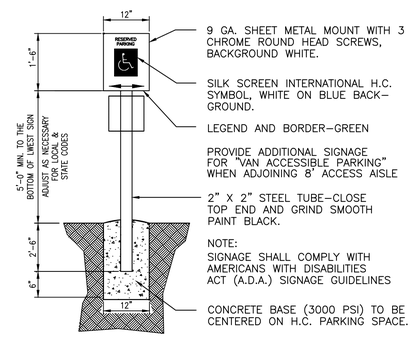
7 PRECAST CONCRETE WHEEL STOP

NOT TO SCALE



11 PAINTED STOP BAR

NOT TO SCALE



9 GA. SHEET METAL MOUNT WITH 3 CHROME ROUND HEAD SCREWS, BACKGROUND WHITE.

SILK SCREEN INTERNATIONAL H.C. SYMBOL, WHITE ON BLUE BACK-GROUND.

LEGEND AND BORDER-GREEN

PROVIDE ADDITIONAL SIGNAGE FOR "VAN ACCESSIBLE PARKING" WHEN ADJOINING 8' ACCESS AISLE

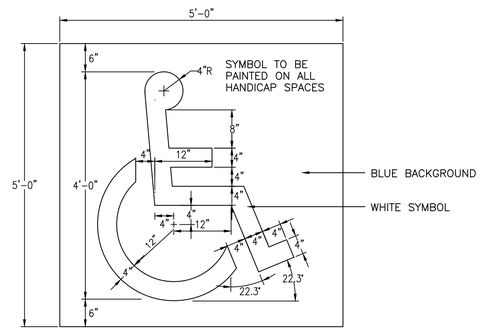
2" X 2" STEEL TUBE-CLOSE TOP END AND GRIND SMOOTH PAINT BLACK.

NOTE:
SIGNAGE SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT (A.D.A.) SIGNAGE GUIDELINES

CONCRETE BASE (3000 PSI) TO BE CENTERED ON H.C. PARKING SPACE.

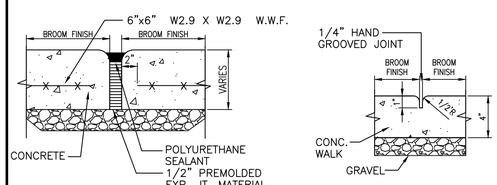
8 EXTERIOR ACCESSIBLE SIGN

NOT TO SCALE



5 PAINTED ACCESSIBLE SYMBOL

NOT TO SCALE



EXPANSION JOINT

CONTROL JOINT

5 SIDEWALK JOINTS

NOT TO SCALE

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George B. Hudleston, III P.E. 75608 Florida Firm Registration No. 28050
Edward A. Browder FLA LA6666790

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION

FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER
at Lawnwood Regional Medical Center & Heart Institute

GEORGE B. HUDLESTON, III
LICENSE NUMBER 75608
STATE OF FLORIDA
PROFESSIONAL ENGINEER
5/29/15

DATE	REVISIONS
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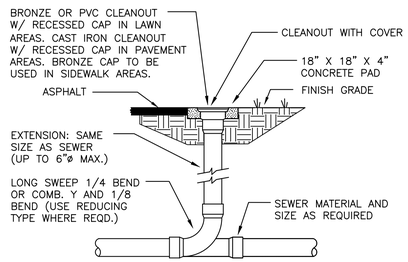
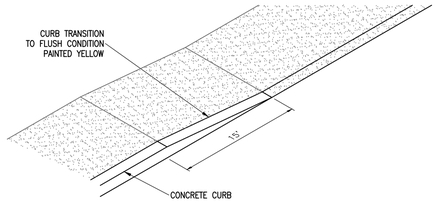
C7.0

DETAILS

C:\Projects\2015\20150322\dwg\Construction\20150322_C7-0_DET-0.dwg-C7.0 Details May 28, 2015 - 5:39pm ianderson



10 CLEANOUT
NOT TO SCALE



7 CURB TRANSITION
NOT TO SCALE

4 RESERVED
NOT TO SCALE

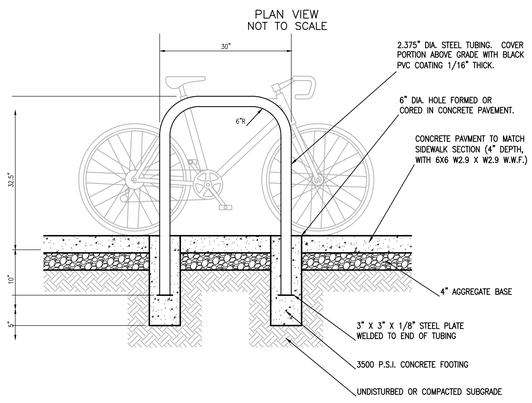
1 RESERVED
NOT TO SCALE

11 BICYCLE RACK AND PAD
NOT TO SCALE

8 RESERVED
NOT TO SCALE

5 RESERVED
NOT TO SCALE

2 RESERVED
NOT TO SCALE



NOTE:
DESIGN OF BICYCLE RACKS SHALL COMPLY WITH ST. LUCIE COUNTY CODE.

9 RESERVED
NOT TO SCALE

6 RESERVED
NOT TO SCALE

3 RESERVED
NOT TO SCALE

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Edward A. Browder FLA LA6666790
Florida Firm Registration No. 28050

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
FORT PIERCE, FLORIDA

Lawnwood Physical Rehabilitation Center
at Lawnwood Regional Medical Center & Heart Institute

GEORGE B. HUDDLESTON, III
LICENSE NO. 75608
STATE OF FLORIDA
PROFESSIONAL ENGINEER
5/29/15

DATE	REVISIONS
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C7.1
DETAILS

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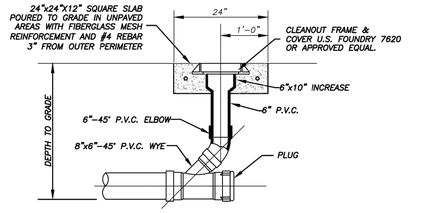
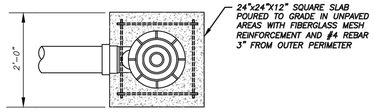


SECTION



PLAN

TERMINAL CLEANOUT DETAIL (COMMERCIAL)
(N.T.S.)

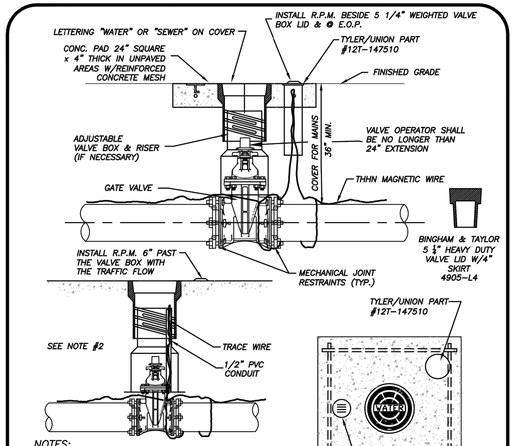
TERMINAL CLEANOUT DETAIL WASTEWATER			S-4B
10-08 DATE:	REVISION:	RBE BY:	APPD:
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 3 OF 3	

FORT PIERCE UTILITIES AUTHORITY

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THIN WIRE.
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

WATER DISTRIBUTION			G-1 NOTES
02-06 DATE:	REVISION:	BY:	APPD:
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 1 OF 2	

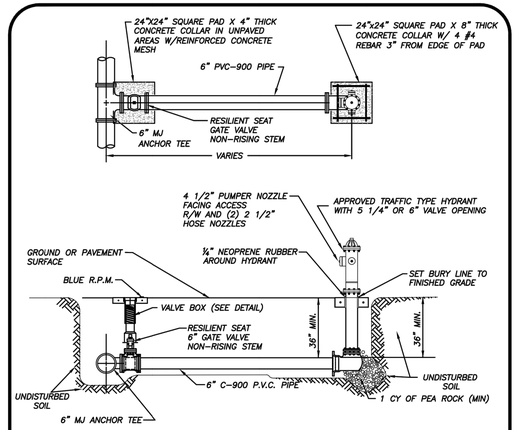


NOTES:

1. BLUE REFLECTIVE PAVEMENT MARKER (RPM) FOR WATER VALVES AND GREEN RPM FOR WASTEWATER VALVES PAVEMENT EDGE.
2. FOR WATER AND WASTEWATER VALVES INSTALLED IN PAVED AREAS, ELIMINATE CONCRETE PAD AND ENCASE THE MAGNETIC WIRE IN 1/2" PVC INSIDE THE VALVE BOX SEVEN INCHES BELOW GRADE.
3. DIP MAY BE USED AS RISERS ONLY IF A VALVE BOX IS NOT MANUFACTURED FOR THAT DEPTH. NO PVC RISERS SHALL BE USED IN ANY CIRCUMSTANCES.

TYPICAL GATE VALVE & VALVE BOX DETAIL
N.T.S.

TYPICAL GATE VALVE & VALVE BOX DETAIL			M-6
2015 DATE:	RPM PLACEMENT REVISION:	SLL BY:	JLC APPD:
DESIGNED: JJM	COMPUTER FILE # MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	

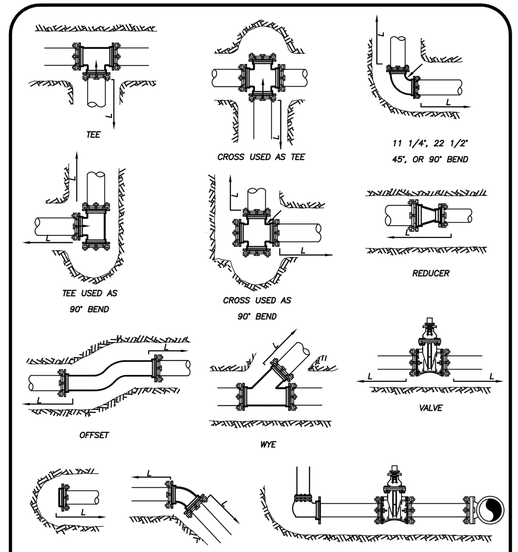


NOTES:

1. HYDRANT SHALL BE INSTALLED PLUMB & TRUE.
2. HYDRANT SHALL BE PAINTED CARNIVAL RED FROM FACTORY.
3. HEEL TO REST IN UNDISTURBED SOIL.
4. THE ONLY HYDRANTS ACCEPTABLE ARE: KENNEDY GUARDIAN, MUELLER CENTURION, & AMERICAN AVK, CLOW OR APPROVED EQUAL.
5. HYDRANT ASSEMBLY MUST BE RESTRAINED TO TEE.
6. ALL FITTINGS SHALL BE MECHANICAL JOINT.
7. ENTIRE ASSEMBLY TO BE MECHANICALLY RESTRAINED.
8. BLUE LOCATOR SHALL BE PLACED IN CENTER OF TRAVEL LANE CLOSEST TO HYDRANT.
9. ALL HYDRANT VALVE BOX COVERS SHALL BE PAINTED CARNIVAL RED.
10. LOCATE WIRE SHALL TERMINATE AT HYDRANT ISOLATION VALVE
11. HYDRANTS SHALL BE NO MORE THAN FIFTEEN FEET (15 FT.) FROM THE CURB OF ROADWAYS OR FROM THE EDGE OF PAVEMENT. CLEARANCES OF SEVEN AND ONE HALF FEET (7FT-6IN.) IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANTS, WITH FOUR FOOT (4 FT.) CLEARANCE TO THE REAR OF HYDRANTS SHALL BE MAINTAINED.

TYPICAL FIRE HYDRANT ASSEMBLY
(N.T.S.)

TYPICAL FIRE HYDRANT ASSEMBLY			W-5
03-09 DATE:	DESIGN REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE # WATERDETAIL.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	



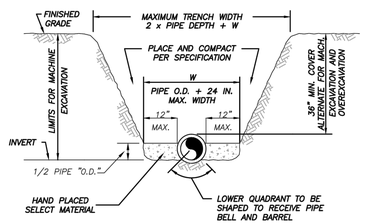
MECHANICAL JOINT ANCHORING REQUIREMENTS
N.T.S.

MECHANICAL JOINT ANCHORING REQUIREMENTS			M-3
2015 DATE:	MEGALUGS REVISION:	SLL BY:	JLC APPD:
DESIGNED: JJM	COMPUTER FILE # MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISITING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER.
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS			G-2 CONSTRUCTION NOTES
02-06 DATE:	REVISION:	BY:	APPD:
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	

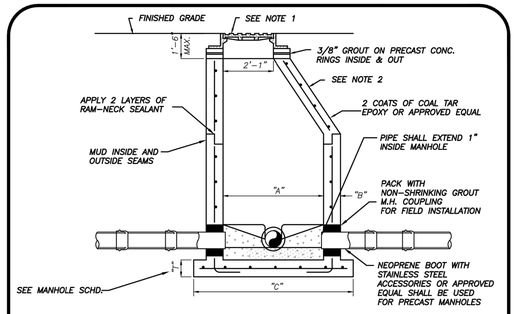


NOTES:

1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
2) INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

TYPICAL TRENCH DETAILS			M-1
DATE:	REVISION:	BY:	APPD:
DESIGNED: JJM	COMPUTER FILE # MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	



PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	"9"	76"	8"
30"-36"	5'-0"	"9"	88"	10"
42"-48"	6'-0"	"9"	100"	12"

TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.
3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.
4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

STANDARD MANHOLE
DEPTH 5'-0" AND GREATER
(N.T.S.)

PRECAST MANHOLE DEPTH 5'- 0" & GREATER			S-7
02-06 DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	

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LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER
at Lawnwood Regional Medical Center & Heart Institute

DATE	REVISIONS
5/6/2015	20150322

C7.2
FPUA DETAILS

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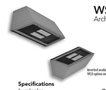

WST LED
Architectural Wall Sconce

Catalog Number
Notes
Type

Introduction

The classic Architectural Wall Sconce is now available with the latest in LED technology. The result is a long-life, maintenance-free product with typical energy savings of 75% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity.

The WST LED is ideal for replacing existing 50 – 175W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

Specifications

Luminaire

Height: 7-1/4" (184 mm)
Width: 16-1/4" (413 mm)
Depth: 6-1/8" (157 mm)
Weight: 17 lbs (7.7 kg)

Optional Back Box (BBW)

Height: 8" (203 mm)
Width: 5-1/2" (140 mm)
Depth: 1-1/2" (38 mm)

Ordering Information

EXAMPLE: WST LED 2 10A700/40K SR3 MVOLT DDBTXD

WST LED									
Series	Light Engines	Performance Package	Distribution	Voltage	Mounting	Options*	Finish (required)
WST LED	1 One engine (10-20W)	10A700/40K 10A700/50K 10A700/MVOLT 40SR	SR2 Type II SR3 Type III	MVOLT 347 480	Shipped included SRM Surface mount PBBW Surface mount with back box (required for 2 engine configurations)	Shipped separately* BBW Surface mount back box (required for 2 engine configurations) WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DBBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone
	2 Two engines (20-40W)	10A700/40K 10A700/50K 10A700/MVOLT 40SR		120 208 240 277	PE Photocontrol, button type (MVOLT only) DMG 0-10V dimming driver (not available with PE) ELCW Emergency battery backup* SCE Single Circuit Enable* PIR Motion sensor for 360° coverage, 7' mounting height (MVOLT only) PIRH Motion sensor for 360° coverage, 15' mounting height (MVOLT only)		

Emergency Battery Operation

The emergency battery backup (ELCW option) is integral to the luminaire - no external housing required! This design provides reliable emergency egress illumination during normal power outages.

All ELCW configurations include an independent secondary driver with an integral relay to immediately detect AC power loss. Dual light engines are used to provide a cost-effective approach to emergency mode and provide additional component redundancy. These design features ensure dependable performance.

The emergency battery will power the luminaire for a minimum duration of three hours from the time AC power is interrupted. Integral self-test circuitry is included to automatically perform code-required tests. Push-to-test switch is mounted at an appropriate height and illuminates an open space with no major obstructions.

The luminaire is light when illuminated at 90° from the mounting surface. Refer to the diagrams below for the single-engine Type IV product in MVOLT only.

WST LED 1 10A700/40K SR3 MVOLT ELCW
10' x 10' Grid/Zone
8' and 12' Mounting Height



NOTES

1. ELCW option operates on any line voltage from 120-277V AC/DC (for Specific 120, 208, 240, or 277 options only select ordering with universal voltage (MVOLT) is recommended).
2. For 2 engine configurations, the ELCW option is only available with SR2 Type II distribution.
3. Must be ordered with PE/Cell for Dusk/Dawn operation.
4. Integral battery pack is rated for 90 minutes minimum duration of three hours from the time AC power is interrupted. Battery pack is maintained at 32°F (0°C) and above. Smaller than 200 cubic inch battery pack. Operates from 120-277V AC voltage input.
5. Not available with MRM options. Not available with 2 engine configurations (20-40W).
6. Integral battery pack is rated for -20° to 65°C ambient temperature range. Not available with PIR or PIRH. Cannot be ordered with 347V or 480V. Type IV only.
7. WG is not available with PIR or ELCW.
8. Suitable for mounting on combustible surfaces. Do not mount directly over J-box.
9. Luminaire is factory-configured for use with the specified options. Field modification may void warranty and/or affect listing. Consult factory for assistance.

Lithonia Lighting, One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8441 • Fax: 770.918.1209 • www.lithonia.com
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Performance Data

Lumen Output

Ratings are based on laboratory tests performed in accordance with ASTM E2166/IES LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual wattage may differ by +/-10% and values may differ by +/-5% when operated on 120V, 208V, 240V, 277V, 347V or 480V power supplied to the luminaire.

Light Engine Configuration	System Watts	Drive Current (mA)	Delivered Lumens	LED Package Count	Color Temperature	Distribution	Lumens per Watt
						SR2	SR3
10A700/40K	19	700	1,900	10	4000K	1,900	1,900	100
10A700/50K	19	700	1,900	10	5000K	1,900	1,900	100
20A700/40K	38	1400	3,800	20	4000K	3,800	3,800	100
20A700/50K	38	1400	3,800	20	5000K	3,800	3,800	100

1 The electrical load data for 347/480V options apply.

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for this luminaire when operating in ambient temperatures other than 25°C.

Ambient Temperature	Lumen Multiplier
0°C	1.04
10°C	1.03
20°C	1.01
25°C	1.00
30°C	0.99
40°C	0.97

Projected LED Lumen Maintenance

Data references the extrapolated projected performance of the WST LED 2 10A700 configuration operating in a 25°C ambient per IESNA TM-21-11. Interpolation of 25°C data per IESNA LM-80-08 and projected per IESNA TM-21-11.

To calculate L70 use the lumen maintenance factor that corresponds to the desired number of hours from the table below and multiply the factor by the values listed in the Performance Data table above.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.94	0.89	0.77

Electrical Load

Light Engine Configuration	System Watts	Current (A)					
		Voltage	120	208	240	277	347	480
1	19W	10W	0.09	0.06	0.05	0.05	n/a	n/a
		20W	0.18				0.06	0.05
2	38W	20W	0.18	0.07	0.07	0.06	n/a	n/a
		40W					0.12	0.10

For photometric testing, data is collected every 5 degrees vertically and horizontally through 360 degrees. Distribution overlay comparisons to 175W metal halide.

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WST LED mini-site.

Isocandela plots for the WST LED 2 10A700/40K SR2, SR3, and SR4. Distances are in units of mounting height (MH).



FEATURES & SPECIFICATIONS

INTENDED USE
The classic architectural shape of the WST LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long-life LEDs and driver make this luminaire virtually maintenance free.

CONSTRUCTION
Rugged, die-cast aluminum housing maximizes sensible heat transfer to optimize thermal transfer from the internal light engine heat sinks and prevents long life. The driver is mounted to the housing for optimal heat sinking and ease of maintenance. The housing and door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

OPTICS
Precision-formulated acrylic lenses are engineered for superior distribution, uniformity, and spacing to-mounting-height applications. Light engines are IESNA LM-79 and LM-80 tested and binned to ensure consistent color temperature. Color consistency is achieved with the LEDRA 4-Step Quad Binning™ criteria for eliminating wavelength spillover.

ELECTRICAL
Light engine(s) consist of 10 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (L70/50K hours at 25°C ambient, per IESNA TM-21-11 calculations). Class 2 power supply. Power factor is >90%. Total harmonic distortion is less than 20%. Complies with FCC 47 CFR Part 15, Subpart B, Class A.

INSTALLATION
A universal mounting plate with integral mounting support arms allows the fixture to hinge down providing easy access to the electrical compartment. Two 1/2" conduit entry holes in the mounting plate provide versatility for field adjustment or wiring installation.

LISTINGS
CSA certified to U.S. and Canadian standards. Light engines are IP65 rated. Luminaire is IP65 rated and suitable for wet locations when mounted with the lens down. SR2 option offers Type II distribution. SR3 option offers Type III distribution. SR4 option offers Type IV distribution.

Designed per Illuminating Engineering Society of North America (IESNA) guidelines. Not all versions of the product may be listed. Consult factory for Certified Powder Coat and other designer/custom color options and availability.

WARRANTY
For complete warranty terms visit our warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Specifications subject to change without notice.

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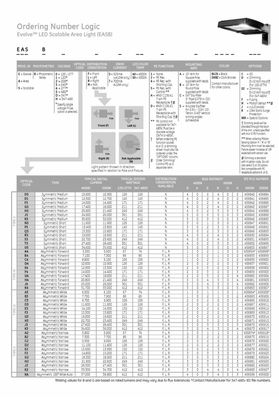
GE
Lighting

Evolve™ LED Area Light
Scalable Area Light (EASB)



imagination at work

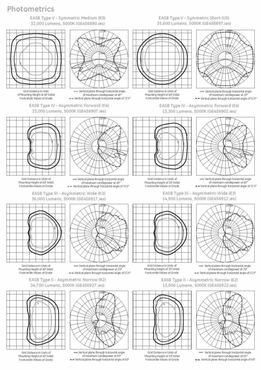
Ordering Number Logic
Evolve™ LED Scalable Area Light (EASB)

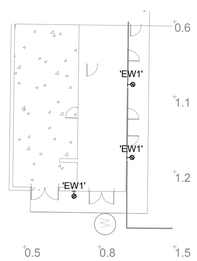


OPTICAL SYSTEM	CATALOG NUMBER	DRIVE CURRENT (mA)	LED COUNT	SYSTEM WATTS	DELIVERED LUMENS	LUMINOUS EFFICACY (LPW)	DISTRIBUTION TYPE	BUG RATING*				LEED v4 BUG RATING**	
								B	U	G		B	U	G
P5	EvolveEASB_P5_40K	530	40	73	9,000	123	V	3	5	3		3	5	3
P5	EvolveEASB_P5_50K	530	40	73	9,000	123	V	3	5	3		3	5	3
P5	EvolveEASB_P5_MVOLT	530	40	73	9,000	123	V	3	5	3		3	5	3
P5	EvolveEASB_P5_40K	700	40	96	12,000	125	V	3	5	3		3	5	3
P5	EvolveEASB_P5_50K	700	40	96	12,000	125	V	3	5	3		3	5	3
P5	EvolveEASB_P5_MVOLT	700	40	96	12,000	125	V	3	5	3		3	5	3
P5	EvolveEASB_P5_40K	1050	40	144	17,000	118	V	3	5	3		3	5	3
P5	EvolveEASB_P5_50K	1050	40	144	17,000	118	V	3	5	3		3	5	3
P5	EvolveEASB_P5_MVOLT	1050	40	144	17,000	118	V	3	5	3		3	5	3
P4	EvolveEASB_P4_40K	530	40	73	9,000	123	IV	3	5	3		3	5	3
P4	EvolveEASB_P4_50K	530	40	73	9,000	123	IV	3	5	3		3	5	3
P4	EvolveEASB_P4_MVOLT	530	40	73	9,000	123	IV	3	5	3		3	5	3
P4	EvolveEASB_P4_40K	700	40	96	12,000	125	IV	3	5	3		3	5	3
P4	EvolveEASB_P4_50K	700	40	96	12,000	125	IV	3	5	3		3	5	3
P4	EvolveEASB_P4_MVOLT	700	40	96	12,000	125	IV	3	5	3		3	5	3
P4	EvolveEASB_P4_40K	1050	40	144	17,000	118	IV	3	5	3		3	5	3
P4	EvolveEASB_P4_50K	1050	40	144	17,000	118	IV	3	5	3		3	5	3
P4	EvolveEASB_P4_MVOLT	1050	40	144	17,000	118	IV	3	5	3		3	5	3
P3	EvolveEASB_P3_40K	530	40	73	9,000	123	III	3	5	3		3	5	3
P3	EvolveEASB_P3_50K	530	40	73	9,000	123	III	3	5	3		3	5	3
P3	EvolveEASB_P3_MVOLT	530	40	73	9,000	123	III	3	5	3		3	5	3
P3	EvolveEASB_P3_40K	700	40	96	12,000	125	III	3	5	3		3	5	3
P3	EvolveEASB_P3_50K	700	40	96	12,000	125	III	3	5	3		3	5	3
P3	EvolveEASB_P3_MVOLT	700	40	96	12,000	125	III	3	5	3		3	5	3
P3	EvolveEASB_P3_40K	1050	40	144	17,000	118	III	3	5	3		3	5	3
P3	EvolveEASB_P3_50K	1050	40	144	17,000	118	III	3	5	3		3	5	3
P3	EvolveEASB_P3_MVOLT	1050	40	144	17,000	118	III	3	5	3		3	5	3
P2	EvolveEASB_P2_40K	530	40	73	9,000	123	II	3	5	3		3	5	3
P2	EvolveEASB_P2_50K	530	40	73	9,000	123	II	3	5	3		3	5	3
P2	EvolveEASB_P2_MVOLT	530	40	73	9,000	123	II	3	5	3		3	5	3
P2	EvolveEASB_P2_40K	700	40	96	12,000	125	II	3	5	3		3	5	3
P2	EvolveEASB_P2_50K	700	40	96	12,000	125	II	3	5	3		3	5	3
P2	EvolveEASB_P2_MVOLT	700	40	96	12,000	125	II	3	5	3		3	5	3
P2	EvolveEASB_P2_40K	1050	40	144	17,000	118	II	3	5	3		3	5	3
P2	EvolveEASB_P2_50K	1050	40	144	17,000	118	II	3	5	3		3	5	3
P2	EvolveEASB_P2_MVOLT	1050	40	144	17,000	118	II	3	5	3		3	5	3
P1	EvolveEASB_P1_40K	530	40	73	9,000	123	I	3	5	3		3	5	3
P1	EvolveEASB_P1_50K	530	40	73	9,000	123	I	3	5	3		3	5	3
P1	EvolveEASB_P1_MVOLT	530	40	73	9,000	123	I	3	5	3		3	5	3
P1	EvolveEASB_P1_40K	700	40	96	12,000	125	I	3	5	3		3	5	3
P1	EvolveEASB_P1_50K	700	40	96	12,000	125	I	3	5	3		3	5	3
P1	EvolveEASB_P1_MVOLT	700	40	96	12,000	125	I	3	5	3		3	5	3
P1	EvolveEASB_P1_40K	1050	40	144	17,000	118	I	3	5	3		3	5	3
P1	EvolveEASB_P1_50K	1050	40	144	17,000	118	I	3	5	3		3	5	3
P1	EvolveEASB_P1_MVOLT	1050	40	144	17,000	118	I	3	5	3		3	5	3

Rating values for 4 and 5 are based on rated lumens and may vary due to flux tolerances. *Contact Manufacturer for 347-480v IES file numbers.

Photometrics





2 ENLARGED ELEC ROOMS
1" = 20'-0"

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.95 fc	1.5 fc	0.5 fc	3:1	1.9:1
Stat Zone # 1	X	4.1 fc	11.3 fc	0.1 fc	113.0:1	41.0:1

EXTERIOR LIGHTING FIXTURE SCHEDULE					
TYPE	MANUFACTURER	CATALOG NUMBER	NUMBER & SIZE LAMPS	MOUNT	REMARKS
EP4	GE	EASB SERIES	LED	POLE	EXISTING PARKING LOT FIXTURE (TYPE IV DIST.)
EW1	LITHONIA	WSTLED-1-10A700/50K-SR3-MVOLT-DDBXD-PE	24W LED	SURFACE	EXTERIOR WALL PACK

1 SITE PLAN
1" = 40'-0"

PRINT DATE: 5/5/2015 8:25:39 AM
FILE INFO: C:\Revit Projects\ICT_150134_E15_Central_bsheppard.rvt

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Electrical Engineer Florida Registration
Joshua R. Cartwright, P.E. #71893

JOSHUA R. CARTWRIGHT LICENSE No 71893 STATE OF FLORIDA PROFESSIONAL ENGINEER

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PROGRESS DRAWING NOT FOR CONSTRUCTION

Dwg. Coord.: BCS Tech. Coord.: JRC 15078.01

ELECTRICAL - SITE PLAN — ES01

CITY SUBMISSION — 05/06/15

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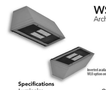

WST LED
Architectural Wall Sconce

Catalog Number
Notes
Type

Introduction

The classic Architectural Wall Sconce is now available with the latest in LED technology. The result is a long-life, maintenance-free product with typical energy savings of 75% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity.

The WST LED is ideal for replacing existing 50 – 175W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

Specifications

Luminaire

Height: 7-1/4" (184 mm)
Width: 16-1/4" (413 mm)
Depth: 6-1/8" (157 mm)
Weight: 17 lbs (7.7 kg)

Optional Back Box (BBW)

Height: 8" (203 mm)
Width: 5-1/2" (140 mm)
Depth: 1-1/2" (38 mm)

Ordering Information

EXAMPLE: WST LED 2 10A700/40K SR3 MVOLT DDBTXD

WST LED									
Series	Light Engines	Performance Package	Distribution	Voltage	Mounting	Options*	Finish (required)
WST LED	1 One engine (10-20W)	10A700/40K 10A700/50K 10A700/MVOLT 40SR	SR2 Type II SR3 Type III	MVOLT 347 480	Shipped included SRM Surface mount PBBW Surface mount with back box (required for 2 engine configurations)	Shipped separately* BBW Surface mount back box (required for 2 engine configurations) WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DBBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone
	2 Two engines (20-40W)	10A700/40K 10A700/50K 10A700/MVOLT 40SR		120 208 240 277	PE Photocontrol, button type (MVOLT only) DMG 0-10V dimming driver (not available with PE) ELCW Emergency battery backup* SCE Single Circuit Enable* PIR Motion sensor for 360° coverage, 7' mounting height (MVOLT only) PIRH Motion sensor for 360° coverage, 15' mounting height (MVOLT only)		

Emergency Battery Operation

The emergency battery backup (ELCW option) is integral to the luminaire - no external housing required! This design provides reliable emergency egress illumination during normal power outages.

All ELCW configurations include an independent secondary driver with an integral relay to immediately detect AC power loss. Dual light engines are used to provide a cost-effective approach to emergency mode and provide additional component redundancy. These design features ensure dependable performance.

The emergency battery will power the luminaire for a minimum duration of three hours from the time AC power is interrupted. Integral self-test circuitry is included to automatically perform code-required tests. Push-to-test switch is mounted at an appropriate height and illuminates an open space with no major obstructions.

The luminaire is light when illuminated at 90° from the mounting surface. Refer to the diagrams below for the single-engine Type IV product in MVOLT only.

WST LED 1 10A700/40K SR3 MVOLT ELCW
10' x 10' Grid/Zone
8' and 12' Mounting Height



NOTES

1. ELCW option operates on any line voltage from 120-277V AC/DC (for Specific 120, 208, 240, or 277 options only select ordering with universal voltage (MVOLT) is recommended).
2. For 2 engine configurations, the ELCW option is only available with SR2 Type II distribution.
3. Must be ordered with PE/Cell for Dusk/Dawn operation.
4. Integral battery pack is rated for 90 minutes minimum duration of three hours from the time AC power is interrupted. Battery pack is maintained at 32°F (0°C) and above. Smaller than 200 cubic inch battery pack. Operates from 120-277V AC voltage input.
5. Not available with MRM options. Not available with 2 engine configurations (20-40W).
6. Integral battery pack is rated for -20° to 65°C ambient temperature range. Not available with PIR or PIRH. Cannot be ordered with 347V or 480V. Type IV only.
7. WG is not available with PIR or ELCW.
8. Suitable for mounting on combustible surfaces. Do not mount directly over J-box.
9. Luminaire is factory-configured for use with the specified options. Field modification may void warranty and/or affect listing. Consult factory for assistance.

Lithonia Lighting, One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8441 • Fax: 770.918.1209 • www.lithonia.com
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Performance Data

Lumen Output

Ratings are based on laboratory tests performed in accordance with ASTM E2166/IES LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual wattage may differ by +/-10% and values may differ by +/-5% when operated on 120V, 208V, 240V, 277V, 347V or 480V power supplied to the luminaire.

Light Engine Configuration	System Watts	Drive Current (mA)	Delivered Lumens	LED Package Count	Color Temperature	Distribution	Lumens per Watt
						SR2	SR3
10A700/40K	19	700	1,900	10	4000K	1,900	1,900	100
10A700/50K	19	700	1,900	10	5000K	1,900	1,900	100
20A700/40K	38	1400	3,800	20	4000K	3,800	3,800	100
20A700/50K	38	1400	3,800	20	5000K	3,800	3,800	100

1 The electrical load data for 347/480V options apply.

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for this luminaire when operating in ambient temperatures other than 25°C.

Ambient Temperature	Lumen Multiplier
0°C	1.04
10°C	1.03
20°C	1.01
25°C	1.00
30°C	0.99
40°C	0.97

Projected LED Lumen Maintenance

Data references the extrapolated projected performance of the WST LED 2 10A700 configuration operating in a 25°C ambient per IESNA TM-21-11. Interpolation of 25°C data per IESNA LM-80-08 and projected per IESNA TM-21-11.

To calculate L70 use the lumen maintenance factor that corresponds to the desired number of hours from the table below and multiply the factor by the values listed in the Performance Data table above.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.94	0.89	0.77

Electrical Load

Light Engine Configuration	System Watts	Current (A)					
		Voltage	120	208	240	277	347	480
1	19W	10W	0.09	0.06	0.05	0.05	n/a	n/a
		20W	0.18				0.06	0.05
2	38W	20W	0.18	0.07	0.07	0.06	n/a	n/a
		40W					0.12	0.10

For photometric testing, data is collected every 5 degrees vertically and horizontally through 360 degrees. Distribution overlay comparisons to 175W metal halide.

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WST LED mini-site.

Isocandela plots for the WST LED 2 10A700/40K SR2, SR3, and SR4. Distances are in units of mounting height (MH).



FEATURES & SPECIFICATIONS

INTENDED USE
The classic architectural shape of the WST LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long-life LEDs and driver make this luminaire virtually maintenance free.

CONSTRUCTION
Rugged, die-cast aluminum housing maximizes sensible heat transfer to optimize thermal transfer from the internal light engine heat sinks and prevents long life. The driver is mounted to the housing for optimal heat sinking and ease of maintenance. The housing and door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

OPTICS
Precision-formulated acrylic lenses are engineered for superior distribution, uniformity, and spacing to-mounting-height applications. Light engines are IESNA LM-79 and LM-80 tested and binned to ensure consistent color temperature. Color consistency is achieved with the LEDRA 4-Step Quad Binning™ criteria for eliminating wavelength spillover.

ELECTRICAL
Light engine(s) consist of 10 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (L70/50K hours at 25°C ambient, per IESNA TM-21-11 calculations). Class 2 power supply. Power factor is >90%. Total harmonic distortion is less than 20%. Complies with FCC 47 CFR Part 15, Subpart B, Class A.

INSTALLATION
A universal mounting plate with integral mounting support arms allows for fixture to hinge down providing easy access to electrical connections. Includes a 1/2" NPT conduit hub on the mounting plate and slots accessible for field adjustment or wire management.

LISTINGS
CSA certified to U.S. and Canadian standards. Light engines are IP65 rated. Luminaire is IP65 rated and suitable for wet locations when mounted with the lens down. SR2 option offers a 120° x 270° distribution. SR3 option offers a 180° x 270° distribution.

Designed per Illuminating Engineering Society of North America (IESNA) guidelines. Not all versions of the product may be listed by DLC. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are listed.

WARRANTY
5-year limited warranty. Full warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Specifications subject to change without notice.

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Rev. 07/31/14

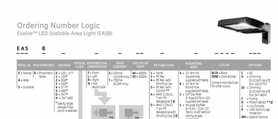
GE
Lighting

Evolve™ LED Area Light
Scalable Area Light (EASB)



imagination at work

Ordering Number Logic
Evolve™ LED Scalable Area Light (EASB)



FIXTURE CODE	SIZE	TYPICAL DELIVERED LUMENS		TYPICAL WATTS		DISTRIBUTION TYPE AVAILABLE	BUG RATINGS*				DELIVERED LUMENS	
		4000K	5000K	4000K	5000K		B	U	G		4000K	5000K
A1	Symmetric Medium	4,200	4,700	56	56	S	1	0	1		400A1	500A1
A2	Symmetric Medium	5,600	6,300	75	75	S	1	0	1		400A2	500A2
A3	Symmetric Medium	7,000	7,900	93	93	S	1	0	1		400A3	500A3
A4	Symmetric Medium	8,400	9,400	112	112	S	1	0	1		400A4	500A4
B1	Symmetric Short	4,200	4,700	56	56	S	1	0	1		400B1	500B1
B2	Symmetric Short	5,600	6,300	75	75	S	1	0	1		400B2	500B2
B3	Symmetric Short	7,000	7,900	93	93	S	1	0	1		400B3	500B3
B4	Symmetric Short	8,400	9,400	112	112	S	1	0	1		400B4	500B4
C1	Symmetric Short	11,200	12,500	149	149	S	1	0	1		400C1	500C1
C2	Symmetric Short	14,000	15,600	186	186	S	1	0	1		400C2	500C2
C3	Symmetric Short	16,800	18,800	224	224	S	1	0	1		400C3	500C3
C4	Symmetric Short	19,600	21,900	261	261	S	1	0	1		400C4	500C4
D1	Asymmetric Forward	4,200	4,700	56	56	V, F, R	2	0	2		400D1	500D1
D2	Asymmetric Forward	5,600	6,300	75	75	V, F, R	2	0	2		400D2	500D2
D3	Asymmetric Forward	7,000	7,900	93	93	V, F, R	2	0	2		400D3	500D3
D4	Asymmetric Forward	8,400	9,400	112	112	V, F, R	2	0	2		400D4	500D4
E1	Asymmetric Forward	11,200	12,500	149	149	V, F, R	2	0	2		400E1	500E1
E2	Asymmetric Forward	14,000	15,600	186	186	V, F, R	2	0	2		400E2	500E2
E3	Asymmetric Forward	16,800	18,800	224	224	V, F, R	2	0	2		400E3	500E3
E4	Asymmetric Forward	19,600	21,900	261	261	V, F, R	2	0	2		400E4	500E4
F1	Asymmetric Wide	4,200	4,700	56	56	V, F, R	3	0	2		400F1	500F1
F2	Asymmetric Wide	5,600	6,300	75	75	V, F, R	3	0	2		400F2	500F2
F3	Asymmetric Wide	7,000	7,900	93	93	V, F, R	3	0	2		400F3	500F3
F4	Asymmetric Wide	8,400	9,400	112	112	V, F, R	3	0	2		400F4	500F4
G1	Asymmetric Narrow	4,200	4,700	56	56	V, F, R	4	0	2		400G1	500G1
G2	Asymmetric Narrow	5,600	6,300	75	75	V, F, R	4	0	2		400G2	500G2
G3	Asymmetric Narrow	7,000	7,900	93	93	V, F, R	4	0	2		400G3	500G3
G4	Asymmetric Narrow	8,400	9,400	112	112	V, F, R	4	0	2		400G4	500G4
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H3	Asymmetric Narrow	16,800	18,800	224	224	V, F, R	4	0	2		400H3	500H3
H4	Asymmetric Narrow	19,600	21,900	261	261	V, F, R	4	0	2		400H4	500H4
J1	Asymmetric Wide	4,200	4,700	56	56	V, F, R	3	0	3		400J1	500J1
J2	Asymmetric Wide	5,600	6,300	75	75	V, F, R	3	0	3		400J2	500J2
J3	Asymmetric Wide	7,000	7,900	93	93	V, F, R	3	0	3		400J3	500J3
J4	Asymmetric Wide	8,400	9,400	112	112	V, F, R	3	0	3		400J4	500J4
K1	Asymmetric Narrow	11,200	12,500	149	149	V, F, R	4	0	3		400K1	500K1
K2	Asymmetric Narrow	14,000	15,600	186	186	V, F, R	4	0	3		400K2	500K2
K3	Asymmetric Narrow	16,800	18,800	224	224	V, F, R	4	0	3		400K3	500K3
K4	Asymmetric Narrow	19,600	21,900	261	261	V, F, R	4	0	3		400K4	500K4

Rating values for A and G are based on rated lumens and may vary due to flux tolerances. *Contact Manufacturer for 347-480v IES file numbers.

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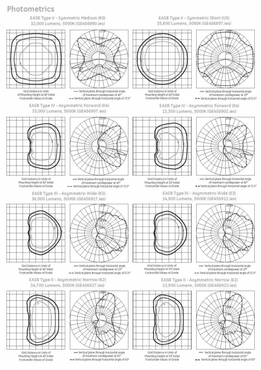

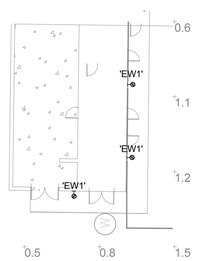

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1 SITE PLAN
1" = 40'-0"

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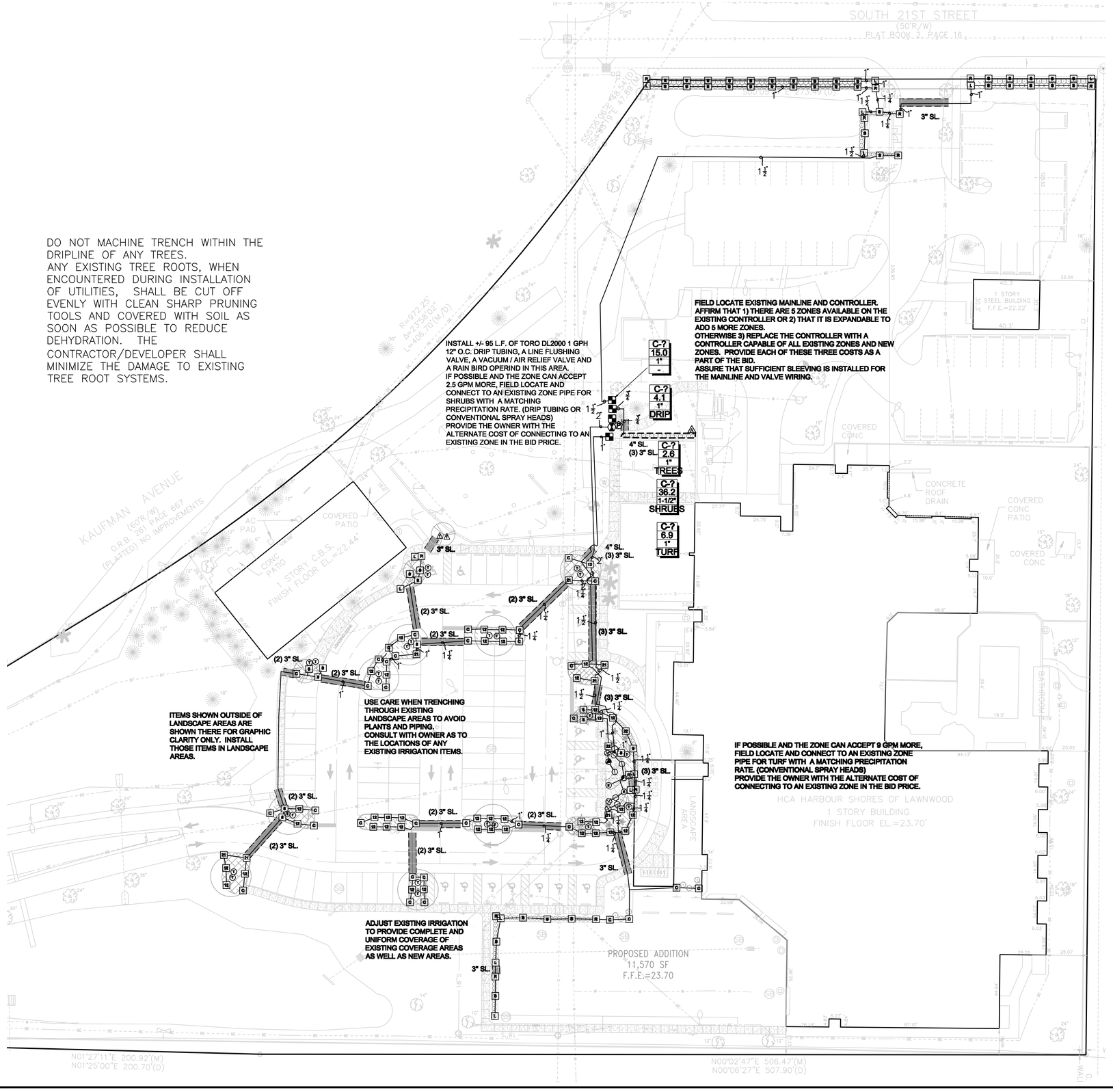
PROGRESS DRAWING NOT FOR CONSTRUCTION

Dwg. Coord.: BCS Tech. Coord.: JRC 15078.01

ELECTRICAL - SITE PLAN ES01

CITY SUBMISSION 05/06/15

DO NOT MACHINE TRENCH WITHIN THE DRIPLINE OF ANY TREES.
ANY EXISTING TREE ROOTS, WHEN ENCOUNTERED DURING INSTALLATION OF UTILITIES, SHALL BE CUT OFF EVENLY WITH CLEAN SHARP PRUNING TOOLS AND COVERED WITH SOIL AS SOON AS POSSIBLE TO REDUCE DEHYDRATION. THE CONTRACTOR/DEVELOPER SHALL MINIMIZE THE DAMAGE TO EXISTING TREE ROOT SYSTEMS.



INSTALL +/- 95 L.F. OF TORO DL2000 1 GPH 12" O.C. DRIP TUBING, A LINE FLUSHING VALVE, A VACUUM / AIR RELIEF VALVE AND A RAIN BIRD OPERIND IN THIS AREA. IF POSSIBLE AND THE ZONE CAN ACCEPT 2.5 GPM MORE, FIELD LOCATE AND CONNECT TO AN EXISTING ZONE PIPE FOR SHRUBS WITH A MATCHING PRECIPITATION RATE. (DRIP TUBING OR CONVENTIONAL SPRAY HEADS) PROVIDE THE OWNER WITH THE ALTERNATE COST OF CONNECTING TO AN EXISTING ZONE IN THE BID PRICE.

FIELD LOCATE EXISTING MAINLINE AND CONTROLLER. AFFIRM THAT 1) THERE ARE 5 ZONES AVAILABLE ON THE EXISTING CONTROLLER OR 2) THAT IT IS EXPANDABLE TO ADD 5 MORE ZONES.
OTHERWISE 3) REPLACE THE CONTROLLER WITH A CONTROLLER CAPABLE OF ALL EXISTING ZONES AND NEW ZONES. PROVIDE EACH OF THESE THREE COSTS AS A PART OF THE BID.
ASSURE THAT SUFFICIENT SLEEVING IS INSTALLED FOR THE MAINLINE AND VALVE WIRING.

ITEMS SHOWN OUTSIDE OF LANDSCAPE AREAS ARE SHOWN THERE FOR GRAPHIC CLARITY ONLY. INSTALL THOSE ITEMS IN LANDSCAPE AREAS.

USE CARE WHEN TRENCHING THROUGH EXISTING LANDSCAPE AREAS TO AVOID PLANTS AND PIPING. CONSULT WITH OWNER AS TO THE LOCATIONS OF ANY EXISTING IRRIGATION ITEMS.

IF POSSIBLE AND THE ZONE CAN ACCEPT 9 GPM MORE, FIELD LOCATE AND CONNECT TO AN EXISTING ZONE PIPE FOR TURF WITH A MATCHING PRECIPITATION RATE. (CONVENTIONAL SPRAY HEADS) PROVIDE THE OWNER WITH THE ALTERNATE COST OF CONNECTING TO AN EXISTING ZONE IN THE BID PRICE.

ADJUST EXISTING IRRIGATION TO PROVIDE COMPLETE AND UNIFORM COVERAGE OF EXISTING COVERAGE AREAS AS WELL AS NEW AREAS.

LEGEND

- Rain Bird 1804 - 5Q PCS-010
- Rain Bird 1804 - 8Q PCS-020
- Rain Bird 1806 - 10H MPR Plastic Nozzle
- Rain Bird 1806 - 10Q MPR Plastic Nozzle
- Rain Bird 1806 - 10T MPR Plastic Nozzle
- Rain Bird 1806 - 12T MPR Plastic Nozzle
- Rain Bird 1806 - 15EST MPR Plastic Nozzle
- Rain Bird 1806 - 8H MPR Plastic Nozzle
- Rain Bird 1806 - 8Q MPR Plastic Nozzle
- Hunter PROS-12-PRS40 W/ MPLCS515
- Hunter PROS-12-PRS40 W/ MPRCS515
- Hunter PROS-12-PRS40 W/ MPSS530
- Hunter PROS-12-PRS40 W/ MP800SR-90
- Hunter PROS-12-PRS40 W/ MPCORNER
- Hunter PROS-12-PRS40 W/ MP1000-90
- Hunter PROS-12-PRS40 W/ MP1000-210
- Hunter PROS-12-PRS40 W/ MP2000-90 (90 Deg.)
- Hunter PROS-12-PRS40 W/ MP2000-90 (180 Deg.)
- Toro DL2000 Drip Tubing (2 Rows)
- Location of Vacuum/ Air Relief Valve, Line Flushing Valve and OPERIND
- Rain Bird 100-PESB 1" Valve w/ \Pr. Reg.
- Rain Bird 150-PESB 1-1/2" Valve w/ \Pr. Reg.
- Point-of-Connection to Existing Main Line
- Class 200 PVC Zone Pipe Routing
- Schedule 40 PVC Sleeve Location
- C-? 2.6 1" APPL — Valve Programming, Nominal Gallonage and Size

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Know what's below.
Call before you dig.

NOTE:
CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILINIES AND SERVICE LINES PRIOR TO EXCAVATING FOR INSTALLATION OF PROPOSED AMENITIES & IRRIGATION.

N

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Edward A. Browder PLA LA6666790
Florida Firm Registration No. 28050

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION

FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER

REGISTERED LANDSCAPE ARCHITECT
EDWARD ALLEN BROWDER
LA6666790
STATE OF FLORIDA
5.29.15

DATE	REVISIONS
5/6/2015	20150322

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IRRIGATION PLAN

NOTES

INSTALL ALL PIPING SHOWN BETWEEN DIFFERENT PIPE SIZES AS THE LARGER SIZED PIPE.

INSTALL ALL PIPING TO INDIVIDUAL HEADS AS 3/4".

INSTALL PIPING BETWEEN THE LAST MARKED PIPE AND PIPING TO INDIVIDUAL HEADS (WHERE NO OTHER MARKINGS SHOW) AS 3/4".

ANY IRRIGATION ITEMS NORMALLY INSTALLED IN LANDSCAPE AREAS THAT ARE SHOWN OUTSIDE OF LANDSCAPE AREAS OR OUTSIDE OF THE PROPERTY LINES ARE SHOWN AS SUCH FOR GRAPHIC CLARITY ONLY. INSTALL THESE ITEMS INSIDE OF PROPERTY LINES AND IN LANDSCAPE AREAS.

THIS SYSTEM REQUIRES 37 GPM AT 50 PSI AT THE POINT OF CONNECTION TO THE EXISTING SYSTEM. VERIFY GALLONAGE AND PRESSURES AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT BEFORE COMMENCING WITH THE INSTALLATION.

PROVIDE PROOF TO THE LANDSCAPE ARCHITECT THAT ALL AVAILABLE MAINTENANCE MANUALS FOR EACH OF THE PRODUCTS INCLUDED IN THIS INSTALLATION HAVE BEEN PROVIDED TO THE OWNER OR OWNER'S REPRESENTATIVE.

ADJUST THE IRRIGATION SYSTEM COMPONENTS AND EXISTING SYSTEM TO PROVIDE UNIFORM COVERAGE. ASSURE THAT THE SYSTEM PROVIDES 100% COVERAGE OF ALL LANDSCAPE MATERIALS INCLUDING SHRUBS, GROUND COVER, TREES AND TURF.

ADJUST THE VERTICAL ORIENTATION OF SPRINKLERS ON SLOPES TO PROVIDE UNIFORM COVERAGE OF THE SLOPED AREA.

IRRIGATION HEADS SHALL BE LOCATED MINIMUM ONE (1) FOOT FROM ANY WALL, COLUMN, OR BUILDING EDGE/FACE.

IRRIGATION HEADS SHALL BE DIRECTED AWAY FROM BUILDING AT ALL TIMES, SO THAT SPRAY DOES NOT HIT BUILDING FACE, COLUMN, WALL, ETC.

ANY EXISTING TREE ROOTS, WHEN ENCOUNTERED DURING INSTALLATION OF UTILITIES, SHALL BE CUT OFF EVENLY WITH CLEAN SHARP PRUNING TOOLS AND COVERED WITH SOIL AS SOON AS POSSIBLE TO REDUCE DEHYDRATION. THE CONTRACTOR/DEVELOPER SHALL MINIMIZE THE DAMAGE TO EXISTING TREE ROOT SYSTEMS.

PROVIDE HAND WATERING FOR ESTABLISHMENT PERIOD FOR ALL TREES NOT LOCATED IN IRRIGATED AREAS OR THAT DO NOT HAVE BUBBLERS INSTALLED AT THOSE TREES.

CONSULT WITH THE OWNER AS TO LOCATIONS OF THIS SYSTEM'S INSTALLATION AS RELATED TO THE FUTURE PHASE OF THIS PROJECT TO MINIMIZE IMPACT ON THIS SYSTEM DURING THE FUTURE PHASES OF CONSTRUCTION.

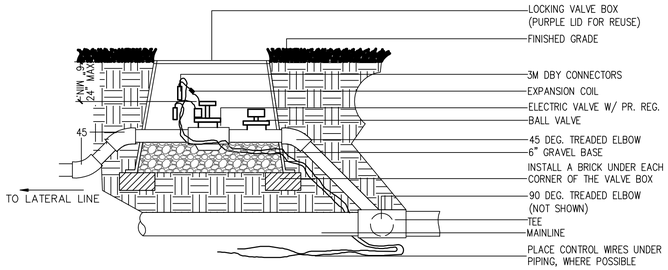
INSTALL MARLEX STREET ELLS FOR ALL HEADS ON RISERS AND ALL SPRINKLERS IN TURF.

INSTALL ALL OTHER SPRINKLERS WTH FUNNY PIPE AND SBE-050 FITTING. (USE SBE-075 IF THREADED FITTING ON PIPE IS 3/4".)

CONNECT TO THE EXISTING MAINLINE FROM THE PUMP AND WELL AS THE POINT OF CONNECTION.

ALL IRRIGATION HEADS IN SHRUBS/GROUNDCOVER AREAS SHALL BE INSTALLED ON RISERS. SEE DETAILS.

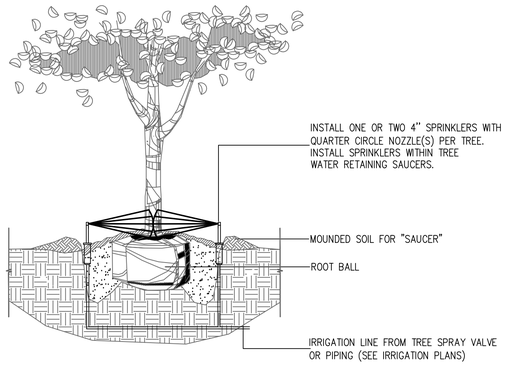
1 / 12-0 GENERAL NOTES
SCALE: N.T.S.



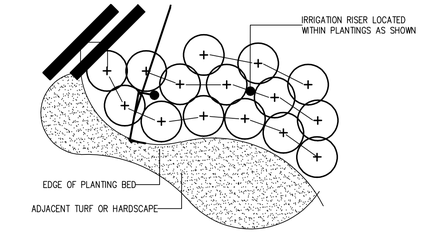
ASSURE THAT ALL CHANGES IN DIRECTION IN THE PIPING ARE THRUST BLOCKED OR RESTRAINED USING MECHANICAL MEANS ACCORDING TO INDUSTRY STANDARDS.

NOTE:
ALL VALVE BOXES SHALL BE MARKED WITH THE CHRISTY I.D. TAGS OR SUBSTITUTION ACCEPTABLE TO OWNER

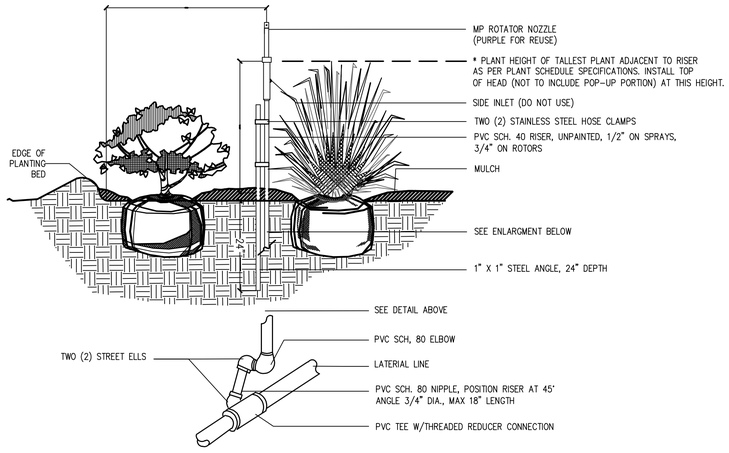
2 / 12-0 ZONE VALVE INSTALLATION
SCALE: N.T.S.



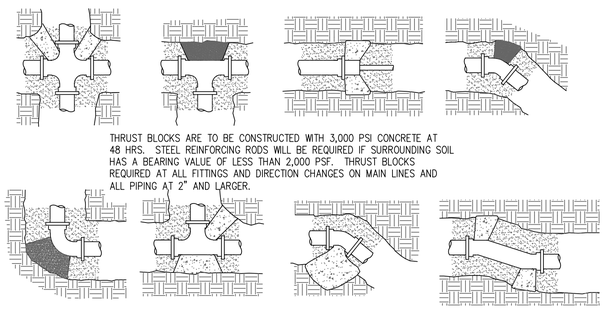
3 / 12-0 TREE SPRINKLER LOCATION
SCALE: N.T.S.



4 / 12-0 SPRAY/ROTOR LAYOUT IN SHRUB BED: PLAN
SCALE: N.T.S.

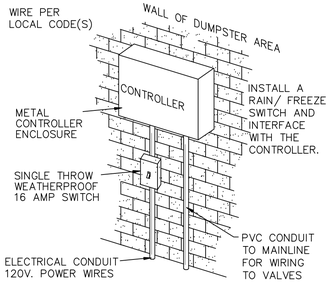


5 / 12-0 SPRAY/ROTOR LAYOUT IN SHRUB BED: SECTION
SCALE: N.T.S.



THRUST BLOCKS ARE TO BE CONSTRUCTED WITH 3,000 PSI CONCRETE AT 48 HRS. STEEL REINFORCING RODS WILL BE REQUIRED IF SURROUNDING SOIL HAS A BEARING VALUE OF LESS THAN 2,000 PSF. THRUST BLOCKS REQUIRED AT ALL FITTINGS AND DIRECTION CHANGES ON MAIN LINES AND ALL PIPING AT 2" AND LARGER.

6 / 12-0 THRUST BLOCK CONFIGURATIONS
SCALE: N.T.S.



7 / 12-0 WALL MOUNT CONTROLLER INSTALLATION
SCALE: N.T.S.

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LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION

FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER

REGISTERED LANDSCAPE ARCHITECT EDWARD ALLEN BROWNLEE LA6666790 STATE OF FLORIDA
5.29.15

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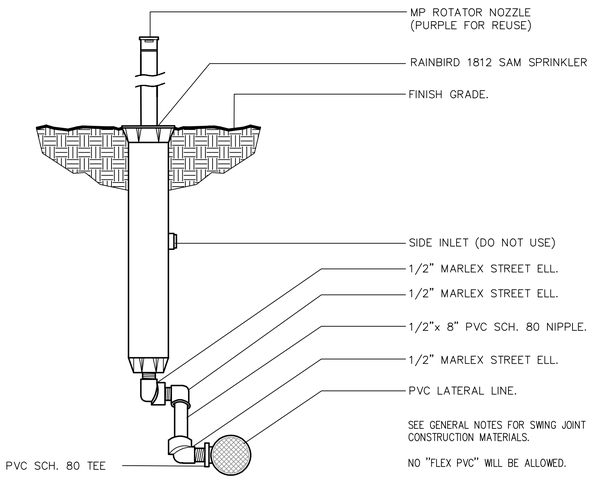
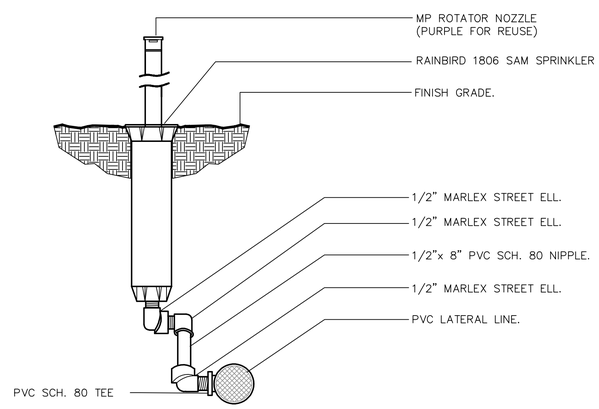
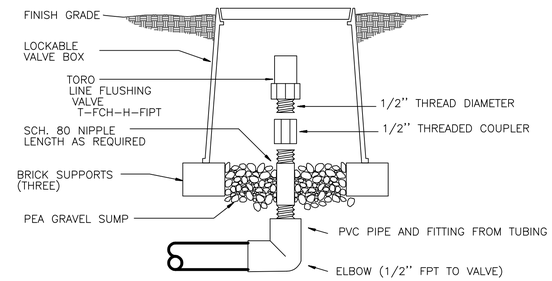
IRRIGATION DETAILS



1 / 12-1 12" SPRAY HEAD AT GRADE DETAIL
SCALE: N.T.S.



2 / 12-1 4" OR 6" SPRAY HEAD AT GRADE DETAIL
SCALE: N.T.S.



NOTE: INSTALL AT EACH AIR RELEASE VALVE LOCATION.

SECTION

3 / 12-1 LINE FLUSHING VALVE
SCALE: N.T.S.

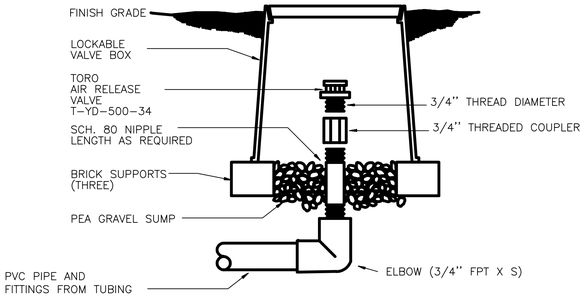
1. Thrust block bearing areas shall be poured against undisturbed material. Where trench wall has been disturbed, excavate all loose material and extend to undisturbed material.
2. Extend thrust block for full length of fittings. Put board in front of plug before pouring concrete. Joints shall not be covered by thrust block.
3. Rough blocking forms shall be used along sides of thrust blocks.
4. Thrust blocks shall be used in combination, as required, to suit the specific fitting arrangement.
5. Alternate designed restraining systems shall be provided where standard thrust blocking is not suitable.
6. All wood blocking shall be pressure treated with preservative.
7. Install a plastic bearier (Visquine) between fittings and thrust block.

4 / 12-1 THRUST BLOCK NOTES
SCALE: N.T.S.

PIPE SIZE (inches)	90° BEND (Sq. Ft.)	45° BEND (Sq. Ft.)	22½° BEND (Sq. Ft.)	11¼° BEND (Sq. Ft.)	TEE OR PLUG (Sq. Ft.)	DESIGN PRESSURE (P.S.I.)
2	.5	.3	.2	.1	.4	150

NOTE: Thrust block areas computed on basis of 2000 lbs. per sq. ft. soil resistance bearing.

5 / 12-1 SCHEDULE OF THRUST BLOCK AREAS
SCALE: N.T.S.



SECTION

8 / 12-1 VACUUM / AIR RELIEF VALVE
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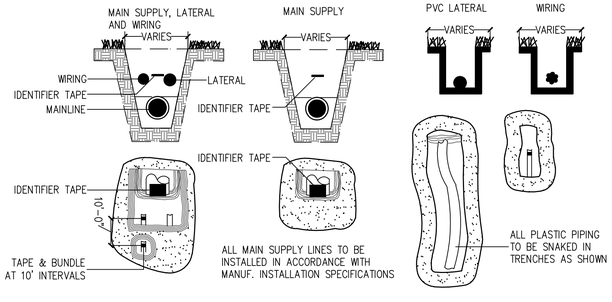
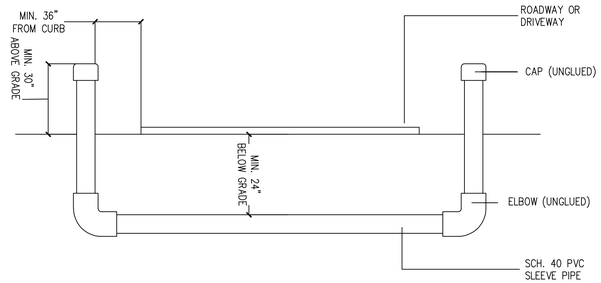
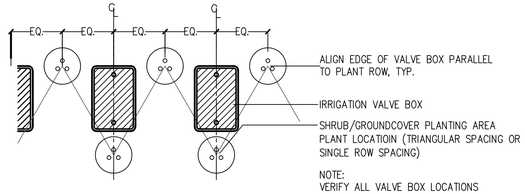


7 / 12-1 PIPE AND WIRE TRENCH CONFIGURATION
SCALE: N.T.S.



6 / 12-1 SLEEVE DETAIL
SCALE: N.T.S.



GROUPINGS IN SHRUB/GROUNDCOVER CONDITIONS
NO VALVE BOXES ARE ALLOWED IN TURF AREAS.

9 / 12-1 TYPICAL VALVE BOX GROUPING
SCALE: N.T.S.

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LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION

FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER

REGISTERED LANDSCAPE ARCHITECT
RAYMOND ALLEN BROWDER
LA6666790
STATE OF FLORIDA
5.7.15

DATE	REVISIONS
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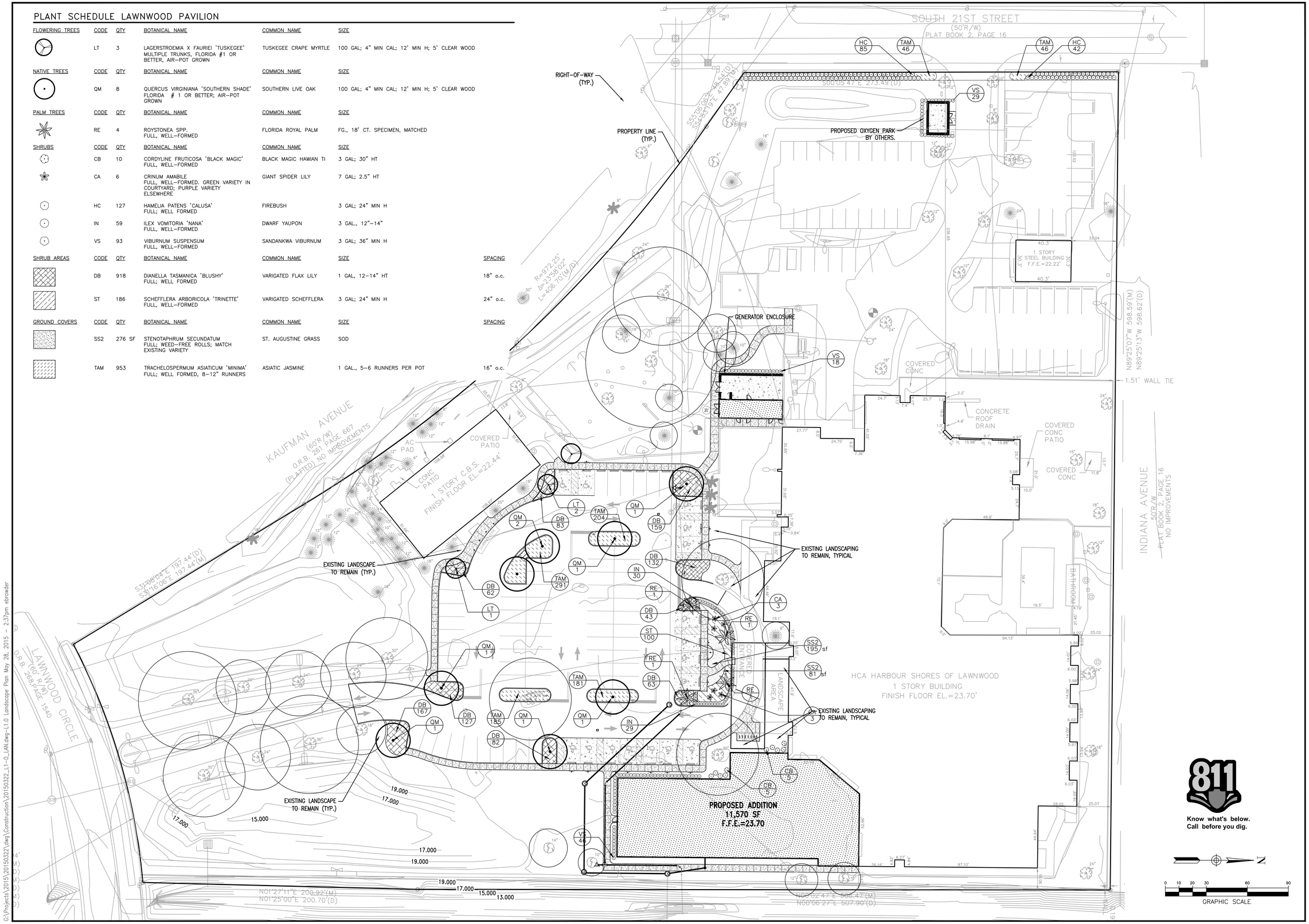
12.1
IRRIGATION DETAILS

PLANT SCHEDULE LAWNWOOD PAVILION

FLOWERING TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
	LT	3	LAGERSTROEMIA X FAURIEI 'TUSKEGEE' MULTIPLE TRUNKS, FLORIDA #1 OR BETTER, AIR-POT GROWN	TUSKEGEE CRAPE MYRTLE	100 GAL; 4" MIN CAL; 12' MIN H; 5' CLEAR WOOD
NATIVE TREES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**
	QM	8	QUERCUS VIRGINIANA 'SOUTHERN SHADE' FLORIDA # 1 OR BETTER; AIR-POT GROWN	SOUTHERN LIVE OAK	100 GAL; 4" MIN CAL; 12' MIN H; 5' CLEAR WOOD
PALM TREES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**
	RE	4	ROYSTONEA SPP. FULL, WELL-FORMED	FLORIDA ROYAL PALM	FG., 18' CT. SPECIMEN, MATCHED
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**
	CB	10	CORDYLINE FRUTICOSA 'BLACK MAGIC' FULL, WELL-FORMED	BLACK MAGIC HAWIAN TI	3 GAL; 30" HT
	CA	6	CRINUM AMABILE FULL, WELL-FORMED. GREEN VARIETY IN COURTYARD; PURPLE VARIETY ELSEWHERE	GIANT SPIDER LILY	7 GAL; 2.5" HT
	HC	127	HAMELIA PATENS 'CALUSA' FULL; WELL FORMED	FIREBUSH	3 GAL; 24" MIN H
	IN	59	ILEX VOMITORIA 'NANA' FULL, WELL-FORMED	DWARF YAUPON	3 GAL., 12"-14"
	VS	93	VIBURNUM SUSPENSUM FULL, WELL-FORMED	SANDANKWA VIBURNUM	3 GAL; 36" MIN H
SHRUB AREAS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**
	DB	918	DIANELLA TASMANICA 'BLUSHY' FULL; WELL FORMED	VARIGATED FLAX LILY	1 GAL, 12-14" HT	18" o.c.
	ST	186	SCHEFFLERA ARBORICOLA 'TRINETTE' FULL, WELL-FORMED	VARIGATED SCHEFFLERA	3 GAL; 24" MIN H	24" o.c.
GROUND COVERS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**SPACING**
	SS2	276 SF	STENOTAPHRUM SECUNDATUM FULL; WEED-FREE ROLLS; MATCH EXISTING VARIETY	ST. AUGUSTINE GRASS	SOD	
	TAM	953	TRACHELOSPERMUM ASIATICUM 'MINIMA' FULL; WELL FORMED, 8-12" RUNNERS	ASIATIC JASMINE	1 GAL., 5-6 RUNNERS PER POT	16" o.c.



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Florida Firm Registration No. 28050

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER
at Lawnwood Regional Medical Center & Heart Institute

REGISTERED LANDSCAPE ARCHITECT
EDWARD ALLEN BROWDER
LA6666790
STATE OF FLORIDA
5.29.15

DATE	REVISIONS
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L1.0
LANDSCAPE PLAN

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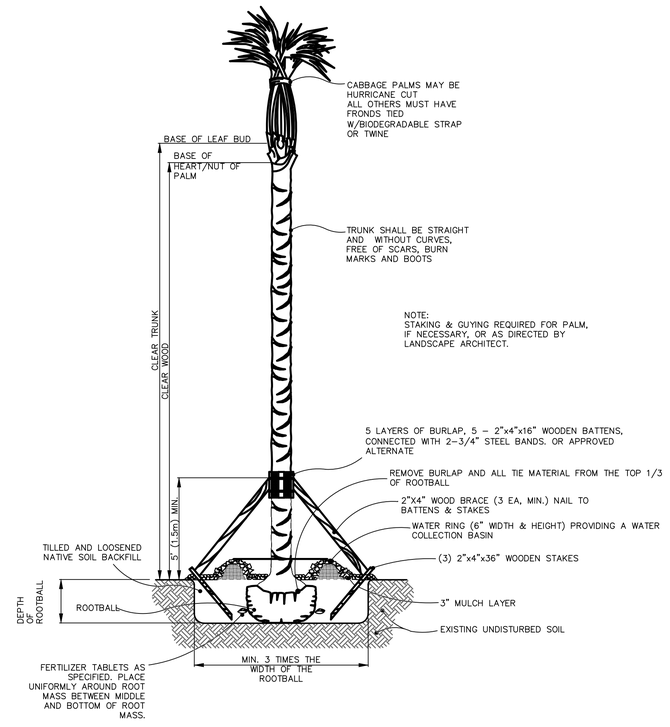
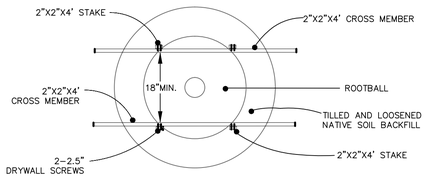
IRRIGATION NOTES:

1. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT REGARDING LIMITS OF IRRIGATION AND SYSTEM/MAIN LINE SIZING FOR FUTURE DEVELOPMENT NEEDS.
2. CONTRACTOR TO CONFIRM ADEQUATE PRESSURE EXISTS TO OPERATE SYSTEM PRIOR TO INSTALLATION. CONTRACTOR TO SPECIFY METER, BACKFLOW AND VALVE SIZE REQUIREMENTS.
3. IRRIGATION SPRINKLER HEADS SHALL BE MANUFACTURED BY EITHER TORO OR RAINBIRD. IRRIGATION CONTROLLER SHALL BE TORO VISION II MODEL OR APPROVED EQUAL. CONTRACTOR TO VERIFY WITH OWNER'S MAINTENANCE STAFF.
4. MAIN LINE TO BE CLASS 200 PVC PIPE. LATERAL LINES TO BE CLASS 150 PVC.
5. IRRIGATION SYSTEM TO BE OPERATIONAL BEFORE PLANTING MATERIALS MAY BE INSTALLED IN PLANTING BEDS.
6. INSTALL SPRINKLER HEADS ACCORDING TO MANUFACTURERS SPECIFICATIONS. FLUSH ALL LINES BEFORE INSTALLING NOZZLES.
7. WIRE CONNECTIONS TO BE MADE BY USING RAINBIRD MODEL ST-103/PT-ST SNAP-TITE CONNECTIONS.
8. LEAVE 18 INCHES OF ADDITIONAL WIRE AT EACH VALVE LOCATION. ROLL WIRE INTO COIL AT EACH LOCATION.
9. ALL VALVES SHALL BE LOCATED IN AMATEX 10 INCH CIRCULAR VALVE BOXES WITH COVER, OR EQUAL.
10. IRRIGATION CONTRACTOR TO COORDINATE PLACEMENT OF REQUIRED SLEEVES WITH GENERAL CONTRACTOR PRIOR TO PAVING AND CONCRETE INSTALLATION BEING COMPLETED.
11. SPRINKLERS IN PARKING PACE OVERHANGS SHALL BE LOCATED 18" BACK OF CURB.
12. SPRINKLERS IN ALL LANDSCAPE AREAS SHALL CLEAR ALL PLANT MATERIALS WHEN IN OPERATION.
13. ALL EXPOSED PVC PIPE SHALL BE PAINTED FLAT BLACK.

PLANTING NOTES

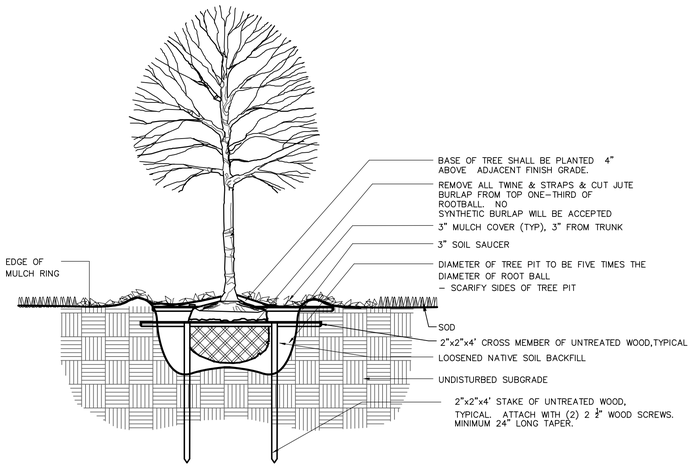
1. BASE INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY SOTHERS. LITTLEJOHN AND ANY OF THEIR CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.
2. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO CONFIRM ALL MATERIAL QUANTITIES. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES SHOWN ON THE PLAN SHALL TAKE PRECEDENCE OVER THE MATERIAL SCHEDULE.
3. NO SUBSTITUTIONS AS TO TYPE, SIZE, OR SPACING OF PLANT MATERIALS SPECIFIED ON THIS PLAN MAY BE MADE WITHOUT THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
4. THE CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY. SOME UNDERGROUND UTILITIES WILL HAVE TO BE ADJUSTED TO ALLOW FOR THE INSTALLATION OF PROPOSED TREES.
5. ALL PLANTING BEDS TO RECEIVE MULCH AS SPECIFIED. SEE SPECIFICATION MANUAL.
6. NEW TREE PLANTINGS TO BE STAKED PER PLANTING DETAILS
7. DIMENSIONS LISTED FOR HEIGHTS, SPREAD AND TRUNK SPECIFICATIONS ON THE PLANT MATERIAL SCHEDULE ARE GENERAL GUIDE FOR THE MINIMUM REQUIRED SIZE OF EACH PLANT. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR INSTALLING PLANT MATERIAL THAT MEETS OR EXCEEDS LOCAL CODE REQUIREMENTS.
8. PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL PLANTING BEDS IMMEDIATELY PRIOR TO PLACEMENT OF MULCH FOR WEED CONTROL.
9. ALL DISTURBED AREAS OF THE SITE ARE TO BE SODDED WITH ST. AUGUSTINE SOD TO MATCH EXISTING.
10. NO EXCAVATION OR PLANTING PIT SHALL BE LEFT OPEN OVERNIGHT.
11. THE LANDSCAPE CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS, LICENSES, ETC. AND SHALL GIVE ALL NOTICES AND COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, CODES, RULES AND REGULATIONS DURING THE COURSE OF THE INSTALLATION OF THIS PROJECT.
12. ALL PLANT MATERIALS TO BE NURSERY GROWN AND TO COMPLY WITH THE AMERICAN STANDARD FOR NURSERY STOCK FOR SIZE AND QUALITY.
13. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REFUSE ANY PLANT MATERIAL OR ANY DEFECTIVE WORKMANSHIP.
14. ALL PLANTS SHALL HAVE A WELL-FORMED HEAD WITH MINIMUM CALIPER, HEIGHT AND SPREAD OF THE SIDE BRANCHES AS SHOWN ON THE PLANT LIST. TRUNKS SHALL BE UNDAMAGED AND SHAPE SHALL BE TYPICAL OF THE SPECIES.
15. MEASUREMENT OF CONIFER HEIGHT SHALL INCLUDE NOT MORE THAN FIFTY PERCENT (50%) OF THIS YEARS VERTICAL GROWTH (TOP CANDLE).
16. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR STAKING AND LAYOUT OF PLANTINGS ON THIS PROJECT. THE LANDSCAPE ARCHITECT OR OWNER SHALL BE ADVISED WHEN STAKES ARE READY FOR INSPECTION ON VARIOUS PLANTING AREAS. ALL LAYOUT WORK SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER PRIOR TO OPENING ANY PLANT PITS.
17. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO VERIFY THAT EACH EXCAVATED TREE OR SHRUB PIT WILL PERCOLATE (DRAIN) PRIOR TO ADDING TOPSOIL AND INSTALLING TREES OR SHRUBS. THE CONTRACTOR SHALL FILL THE BOTTOM OF SELECTED HOLES WITH SIX INCHES OF WATER. THIS WATER SHOULD PERCOLATE OUT WITHIN A 24-HOUR PERIOD. THE OWNER OR LANDSCAPE ARCHITECT SHALL VERIFY ACCURACY AND EFFECT OF PERCOLATION TESTING. IF THE SOIL AT A GIVEN AREA DOES NOT DRAIN PROPERLY, A P V C DRAIN OR GRAVEL SUMP SHALL BE INSTALLED OR THE PLANTING RELOCATED.
18. SHOULD THE LANDSCAPE CONTRACTOR ENCOUNTER UNSATISFACTORY SURFACE OR OTHER SUBSURFACE DRAINAGE CONDITIONS, SOIL DEPTH, LATENT SOILS, HARD PAN, STEAM OF OTHER UTILITY LINES OR OTHER CONDITIONS THAT WILL JEOPARDIZE THE HEALTH AND VIGOR OF THE PLANTS, HE MUST ADVISE THE LANDSCAPE ARCHITECT IN WRITING OF THE CONDITIONS PRIOR TO INSTALLING THE PLANTS, OTHERWISE THE LANDSCAPE CONTRACTOR WARRANTS THAT THE PLANTING AREAS ARE SUITABLE PROPER GROWTH AND DEVELOPMENT OF THE PLANTS TO BE INSTALLED.
19. NO MATERIAL SHALL BE PLANTED BEFORE FINISH GRADING HAS BEEN COMPLETED.
20. EXISTING TREES TO BE PRESERVED ARE TO BE BARRICADED BEFORE BEGINNING CONSTRUCTION. IN ACCORDANCE WITH THE TREE PRESERVATION NOTES AND DETAILS ON THE CIVIL EROSION CONTROL PLANS.
21. SELECTIVE CLEARING CONSISTING OF REMOVAL OF VINES, SAPLINGS UNDER 1" DIAMETER AND UNDERBRUSH SHALL BE PERFORMED IN TREE PRESERVATION AREAS INTERNAL TO THE PROJECT AND NOTED ON PLANS.
22. ALL BEDS ARE TO BE TILLED TO A DEPTH OF 8" WITH THE ADDITION OF: (1) 6 CU. FT. BALE OR SPHAGNUM PEAT MOSS PER 40 SQ. FT. OF BED AREA; FERTILIZER AS PER SOIL TEST RECOMMENDATION. ALL ADDITIONS ARE TO BE SPREAD AND TILLED INTO THE SOIL UNIFORMLY.
23. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT WHEN THE PLANT MATERIALS ARE AVAILABLE AT THE JOB SITE FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.





PALM PLANTING DETAIL

NOT TO SCALE



SINGLE TRUNK TREE DETAIL

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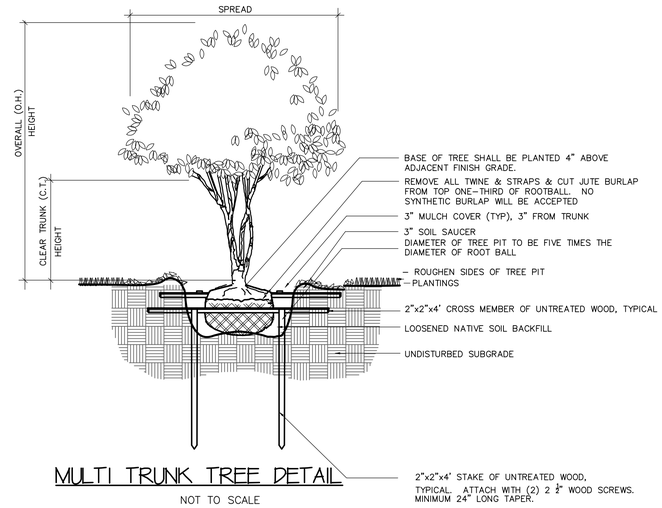

MULTI TRUNK TREE DETAIL

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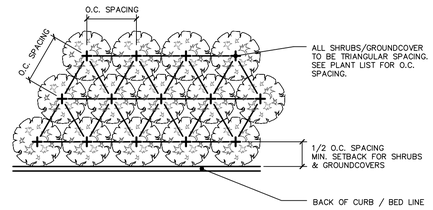
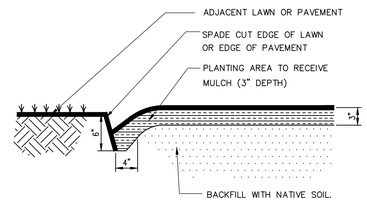


SHRUB & GROUNDCOVER SPACING DETAIL

NOT TO SCALE



SPADE BED EDGE

NOT TO SCALE

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Edward A. Browder PLA LA6666790
Florida Firm Registration No. 28050

LAWNWOOD PHYSICAL REHABILITATION CENTER EXPANSION
FORT PIERCE, FLORIDA

LAWNWOOD PHYSICAL REHABILITATION CENTER

REGISTERED LANDSCAPE ARCHITECT EDWARD A. BROWDER LA6666790 STATE OF FLORIDA 5.29.15

DATE	REVISIONS
5/6/2015	20150322

L2.0

LANDSCAPE DETAILS

G:\Projects\2015\20150322\dwg\Construction\20150322_L1-0_LAN.dwg-L2.0 Landscape Details May 28, 2015 - 2:40pm ebrowder

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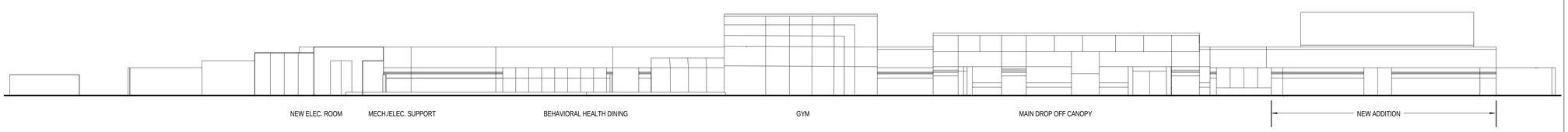

1 **ELEVATION** SOUTH ELEVATION
1/16" = 1'-0"

EXTERIOR MATERIALS/COLORS:

- WALL - EIFS - MATCH EXISTING GOLD
- WINDOWS/DOORS - DARK BROWN FRAMES, BRONZE TINTED GLASS - MATCH EXISTING
- ROOF SCREEN - PERFORATED METAL PANEL - NATURAL FINISH - GALVANIZED

#	DATE	CHANGE DESCRIPTION

LAWNWOOD PHYSICAL REHABILITATION CENTER
AT LAWNWOOD REGIONAL MEDICAL CENTER & HEART INSTITUTE

Lawnwood Medical Center
Expansion & Renovation
1860 N. Lawnwood Circle Fort Pierce, FL 34950
for
HCA

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DANIEL R. PICKETT
FLA NO: AR-91699

Dwg. Coord.: Author Tech. Coord.: Checker 15078.01

EXTERIOR ELEVATIONS A200

CONSTRUCTION DOCUMENTS 05/05/15

PRINT DATE: 5/4/2015 5:26:10 PM
FILE INFO: C:\$$Local Revit Projects\2015 Projects\15078.01 HCA Lawnwood RMC-CENTRAL_RKerr.rvt

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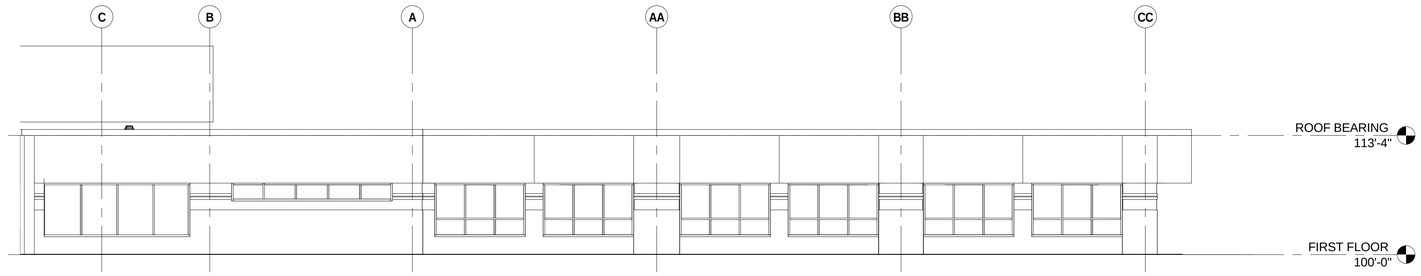
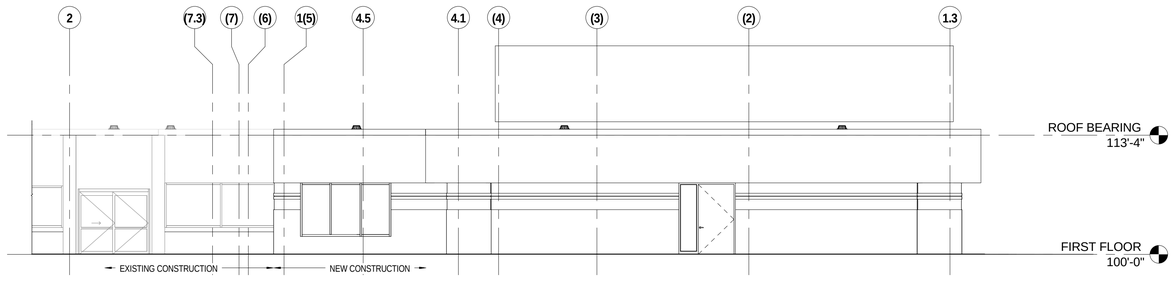


3 ELEVATION WEST
1/8" = 1'-0"



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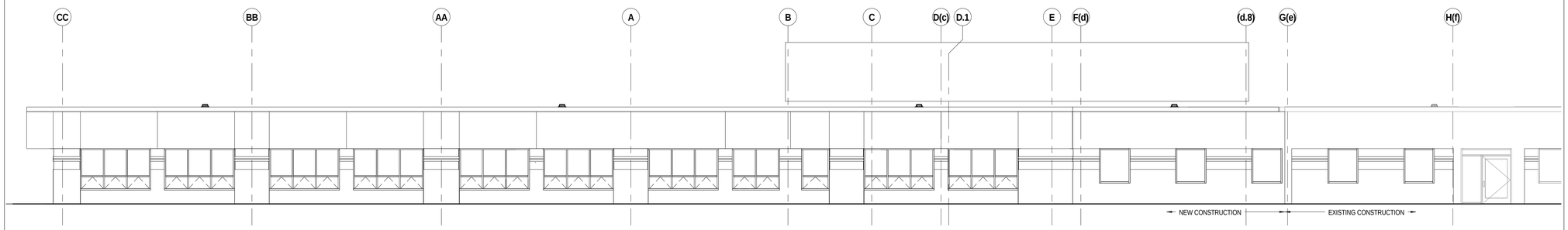
1/8" = 1'-0"



1 ELEVATION EAST
1/8" = 1'-0"

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EXTERIOR MATERIALS/COLORS:

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AT LAWNWOOD REGIONAL MEDICAL CENTER & HEART INSTITUTE

Lawnwood Medical Center Expansion & Renovation

1860 N. Lawnwood Circle Fort Pierce, FL 34950

for

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DANIEL R. PICKETT
FLA NO: AR-91699

Dwg. Coord.: Author	Tech. Coord.: Checker	15078.01
EXTERIOR ELEVATIONS		A300
CONSTRUCTION DOCUMENTS		05/05/15

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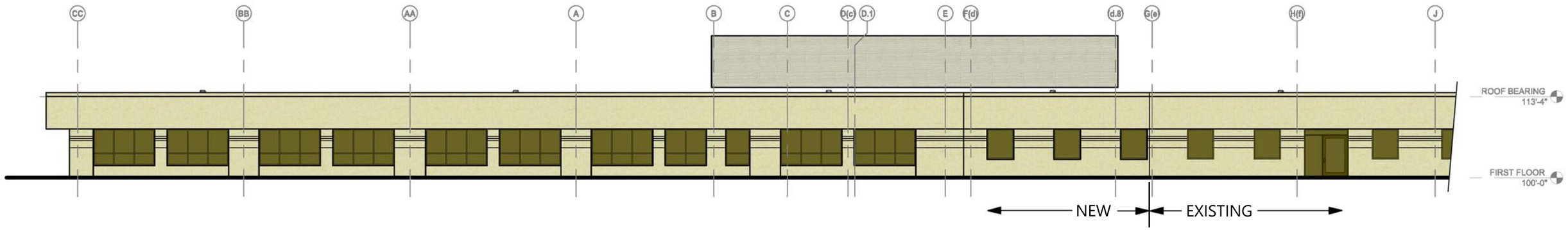

EAST ELEVATION

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

EXTERIOR MATERIALS/COLORS:

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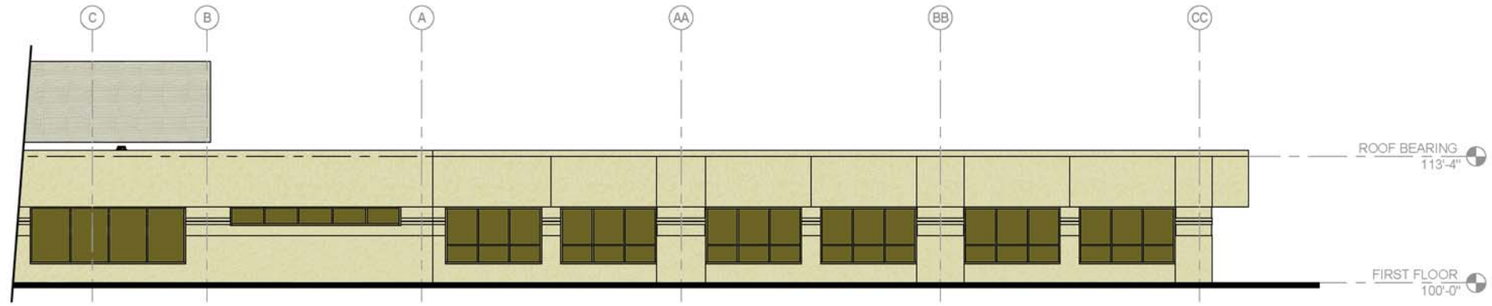

WEST ELEVATION

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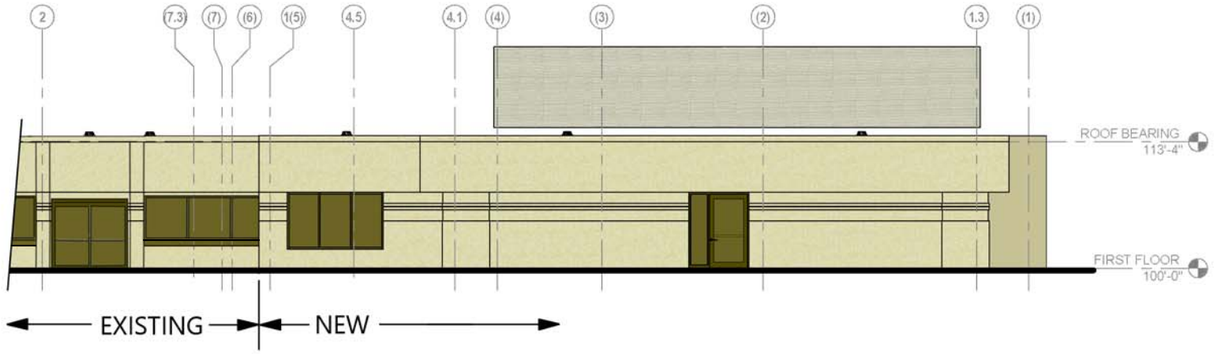

SOUTH ELEVATION

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

EXTERIOR MATERIALS/COLORS:

- WALL - EIFS - MATCH EXISTING GOLD
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- ROOF SCREEN - PERFORATED METAL PANEL - NATURAL FINISH - GALVANIZED

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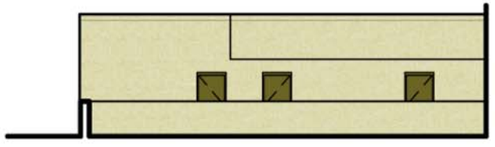
MAY 5, 2015

LAWNWOOD PHYSICAL REHABILITATION CENTER
AT LAWNWOOD REGIONAL MEDICAL CENTER & HEART INSTITUTE

NEW ELECTRICAL ROOMS & GENERATOR SCREEN

(SOUTHWEST CORNER OF BUILDING)



EAST ELEVATION

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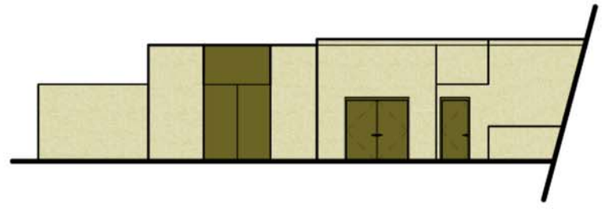


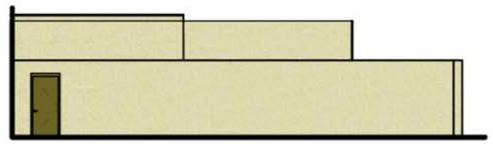
SOUTH ELEVATION

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



WEST ELEVATION

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



NORTH ELEVATION

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

EXTERIOR MATERIALS/COLORS:

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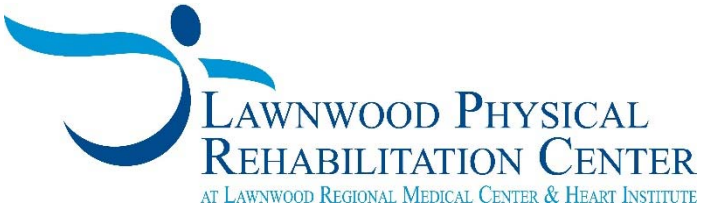
MAY 5, 2015

Lawnwood Physical Rehabilitation Center Addition

Traffic Impact Study

City of Fort Pierce
St. Lucie County, Florida

Prepared For:





Prepared By:
Littlejohn Project No. 20150322
Dated: May 2015

PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida, practicing with Littlejohn Engineering Associates, Inc., a corporation authorized to operate as a Professional Engineering business, License No. 28050, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have approved the Traffic Impact Study for the Lawnwood Physical Rehabilitation Center Addition, dated May 2015.

PROJECT: Lawnwood Physical Rehabilitation Center Addition

LOCATION: City of Ft. Pierce, St. Lucie County, Florida

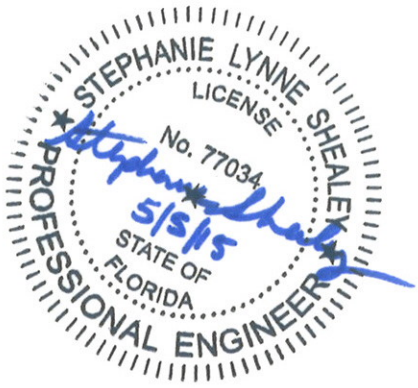
CLIENT: Lawnwood Physical Rehabilitation Center

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

SIGNATURE: Stephanie Shealey

NAME: Stephanie Shealey
P.E.
NUMBER: 77034

DATE: May 5, 2015



TRAFFIC IMPACT STUDY

Lawnwood Physical Rehabilitation Center Addition

City of Ft. Pierce, Florida

Prepared for:

Lawnwood Physical Rehabilitation Center

Prepared by:

Littlejohn Engineering Associates, Inc.
1615 Edgewater Drive, Suite 180
Orlando, Florida 32804

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Appendix B – Turning Movement Counts
Appendix C – Peak Season Factor Category Report
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1.0 Introduction

This traffic impact study has been prepared to evaluate the impacts to the roadway network and intersections that may result from the proposed addition to the Lawnwood Pavilion Rehabilitation Center in Ft. Pierce, Florida. The Lawnwood Pavilion is located at 1860 N Lawnwood Circle in the City of Ft. Pierce, north of the Lawnwood Regional Medical Center, as shown on **Figure 1.1**. The Lawnwood Pavilion currently contains a total of 58 beds, with an additional 16 beds proposed as part of the project. The addition will be constructed in a single phase, with build-out (for the purposes of this study) assumed to be 2020.

The study was prepared according to the guidelines in the St. Lucie TPO Standardized Traffic Impact Studies (TIS) Methodology and Procedures, dated January 23, 2014.

1.1 Project Site

There are two separate parking lots provided for the Pavilion, one with access to 21st Street, north of Kaufman Avenue and one with access to Lawnwood Circle. As there are no changes proposed to the parking lot on the west side of the building, and there is no connectivity proposed between the two parking lots, it is assumed that the trips utilizing the parking lot on the west side of the building will remain constant, with any increase in project trips due to the proposed development occurring in the southern parking lot (with access to Lawnwood Circle). Thus, the study will be focused on the access to Lawnwood Circle and the connections from Lawnwood Circle onto the regional roadway network.

1.2 Proposed Project

The proposed addition to the Lawnwood Pavilion Rehab Center will add 16 beds to the existing 58 bed hospital facility, as shown in **Figure 1.2**. Using the rates shown in the 9th Edition of the *ITE Trip Generation Manual*, with Land Use Code 610 (Hospital), the proposed addition is expected to generate a total of 207 daily trips, or 23 PM peak hour trips, as shown in **Table 1.1**. Due to the hospital land use, internal capture and passer-by capture was not included in the analysis.

Table 1.1 – Trip Generation

Land Use	ITE Code	Intensity	Daily Trip Ends	PM Peak Period				
				Total	In		Out	
					%	Trips	%	Trips
Hospital	610	16 Beds	207	23	33%	7	67%	16

Source: ITE Trip Generation Manual, 9th Edition

Figure 1.1 – Location Map



Figure 1.2
Conceptual Site Plan

EXISTING:

24 PSYCH BEDS	36 SPACES
34 REHAB BEDS	51 SPACES
5,536SF MOB	28 SPACES
TOTAL REQUIRED = 115 SPACES	
ADA REQUIRED = 20 SPACES	

PROVIDED:

REGULAR	101 SPACES
ADA	20 SPACES

PROPOSED:

24 PSYCH BEDS	36 SPACES
50 REHAB BEDS	75 SPACES
5,536SF MOB	28 SPACES
TOTAL REQUIRED = 139 SPACES	
ADA REQUIRED = 18 SPACES	

PROVIDED:

REGULAR	139 SPACES
ADA	18 SPACES

OUTPATIENT PAVILION BUILDING
1870 N. Lawnwood Circle

PAVILION BUILDING
1860 N. Lawnwood Circle

REHAB ADDITION COMPONENT 1

CONCRETE SIDEWALK

CONCRETE WHEELSTOP (TYP)

ASPHALT PAVING

ACCESSIBLE PARKING

COMPONENT 2

1 Story Steel Building

Pool

Bath

LAWNWOOD CIRCLE

KAUFMAN AVE. (60'R/W)

INDIANA AVE. 50'R/W

SOUTH 19TH STREET CANAL
50'R/W
PLAT BOOK 2, PAGE 16

0 50' 100'

FINAL DEVELOPMENT PACKAGE

February 26, 2014

LAWNWOOD MEDICAL CENTER REHAB EXPANSION

FORT PIERCE, FLORIDA

C3.1
COMPONENTS 1 & 2 SITE LAYOUT PLAN

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ENGINEERING
PLANNING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL SERVICES
1935 TWENTY-FIRST AVENUE SOUTH
NASHVILLE, TENNESSEE 37212
PHONE 615-385-4144 / FAX 615-385-4020

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2.0 Study Area Determination

2.1 Project Distribution

The Greater Treasure Coast Regional Planning Model was utilized to determine the distribution of project trips to the regional roadway network. For purposes of distribution, Nebraska Avenue was added to the regional model as a 4-lane roadway, and the project site was added as a separate TAZ from the surrounding development, with a single connection to Nebraska Avenue. Although just the new project trips will be analyzed, the full build-out of the Lawnwood Pavilion (existing + proposed beds) was used in the TAZ to provide a more accurate trip generation for the individual TAZ representing the entire Pavilion. The resulting model distribution is included in **Appendix A**.

2.2 Project Significance

The project traffic assignment generated by the regional planning model was used to determine the significance of traffic from the total build-out of the Lawnwood Pavilion on the roadways surrounding the project site which are included in the St. Lucie TPO Traffic Counts and Level of Service Report (Fall 2014). The appropriate two-way peak-hour service volume capacity was determined for each segment, and compared with trip generation for a 74-bed facility (105 PM peak hour trips) distributed onto the roadway network in order to determine the significance of project trips on the roadway. The results are shown in **Table 2.1**.

Table 2.1 – Project Trip Significance

Roadway	Segment	# of Lanes	LOS Std.	Two-Way Peak-Hour Service Capacity	Distribution	Project Trips	Project Significance
Lawnwood Cir	Nebraska Ave to Project Site	2	D	1,330	100%	105	7.9%
Nebraska Ave	25th St to Lawnwood Cir	4	D	2,920	61%	64	2.2%
	Lawnwood Cir to 13th St	4	D	2,920	39%	41	1.4%
13th St	Virginia Ave to Nebraska Ave	2	D	1,170	6%	6	0.5%
	Nebraska Ave to Georgia Ave	2	D	1,260	23%	24	1.9%
25th St	Virginia Ave to Nebraska Ave	4	D	3,580	26%	27	0.8%
	Nebraska Ave to Okeechobee Rd	4	D	3,580	30%	31	0.9%

2.3 Study Area Determination

Per the TIS Methodology and Procedures, the study area required to be analyzed in the Traffic Impact Study include the roadway segments and intersections which meet one of five criteria.

1. Any road segment to which development traffic makes its connection to the Major Road Network, provided that the development traffic consumes one percent or more of the existing or committed two-way peak-hour service capacity

2. Major Road Segment on which the two-way peak-hour project traffic consumes 5 (five) percent or more of the existing or committed two-way peak-hour service capacity
3. Site driveway connections to public roads
4. Intersections of local/non-major roads (that provide access to the development) with the Major Road Network
5. Major intersections that are a part of the impacted roadways

The segment of Lawnwood Circle meets the first criteria, connecting the project site to the major roadway network with trips from the Pavilion consuming 14% of the two-way service volume capacity of the roadway. There are no roadway segments within the study area that meet the second criteria, as the trips from the Pavilion do not exceed more than 5.0% of the two-way peak-hour service capacity on any roadway segment outside of Lawnwood Circle. Per the third criteria, the intersection of Lawnwood Circle and the project site access will be analyzed. For the fourth criteria, the intersection of Lawnwood Circle and Nebraska Avenue will be analyzed, as this intersection is where project trips first enter the major road network. There are no additional intersections required per the fifth criteria, as the only impacted roadway in the analysis is N Lawnwood Circle.

Based on the criteria, the required study area per the TIS Methodology and Procedures includes the following roadway segment and two intersections:

- N Lawnwood Circle from Nebraska Avenue to the Project Site
- N Lawnwood Circle @ Site Driveway
- Nebraska Avenue @ N Lawnwood Circle (western intersection)

While not a required part of the study network per the guidelines in the TIS Methodology and Procedures, roadway analysis will also be shown for the roadway segments in the St. Lucie TPO Traffic Counts and Level of Service Report which fall within ½ mile (by travel distance) of the project site for informational purposes.

3.0 Data Collection

3.1 Roadway Data

The base roadway data for the roadways included within this study were determined from the 2013 Florida Transportation Information DVD (for roadway classification) as well as the Ft. Pierce Code of Ordinances (for the LOS Standard), and is shown in **Table 3.1**.

Historical AADT data was collected for the roadway segments in the St. Lucie Transportation Planning Organization database in order to determine the historic growth rate for the roadway segments in the surrounding network. This data was collected from the counts published 2008-2014 by the St. Lucie Transportation Planning Organization. A trend analysis was completed for each of the roadway segments, using linear regression, exponential regression, and decaying exponential regression, and choosing the regression method with the highest R^2 value (measure of how well the data fits the regression method). The resulting historic growth rates for the roadway segments included in the analysis are shown in **Table 3.2**.

Table 3.1 – Roadway Information.

Roadway	Roadway Classification	Maintenance Jurisdiction	Area Type	Posted Speed	LOS Standard
Lawnwood Cir	Local	City	Urban	25	D
Nebraska Ave	Collector	City	Urban	25	D
13th St	Collector	City	Urban	25	D
25th St	Principal Arterial – Other	FDOT	Urban	40	D

Source: 2013 Florida Transportation Information DVD; Ft. Pierce Code of Ordinances; Littlejohn

Table 3.2 – Historic Growth Rates

Roadway	Segment	AADT (2008)	AADT (2009)	AADT (2011)	AADT (2012)	AADT (2013)	AADT (2014)	Trend R^2	Growth Rate
Nebraska Ave	25th St to 13th St	n/a	n/a	4,100	4,100	4,100	3,800	75%	-3.6%
13th St	Virginia Ave to Georgia Ave	7,224	7,502	6,700	7,149	6,600	6,937	37%	-1.4%
25th St	Virginia Ave to Okeechobee Rd	21,821	18,096	n/a	22,404	22,264	21,603	19%	1.7%

Source: St. Lucie Transportation Planning Organization Counts, 2008-2014

Due to the segments of Nebraska Avenue and 13th Street having a negative growth rate, and the low R^2 value for 25th Street, an annual growth rate of 1% will be used to grow the turning movement counts and AADT in the analysis for the roadways and intersections.

3.2 Intersection Data

Per the study area determination in the St. Lucie TPO TIS Methodology and Procedures, data was collected for two (2) existing intersections to conduct an evaluation for the intersections included in the study area. Turning movement counts for each of the following intersections were collected for the period from 4:00pm to 6:00pm on April 28, 2015. The turning movement counts are included in **Appendix B**.

- Lawnwood Circle @ Site Driveway
- Nebraska Avenue @ Lawnwood Circle (west intersection)

Before any analysis was conducted, the turning movement counts were adjusted based on the Peak Season Factor Category Report using a factor of 0.98 (a copy of this report is included in **Appendix C**). The seasonally adjusted turning movement volumes are shown on **Figure 3.1**.

The existing turning movement counts were then grown by 1% per year to the analysis build-out year (2020). Project trips were distributed to the roadway network based on the distribution of the existing trips in and out of the existing Lawnwood Pavilion and added to the projected background traffic, as shown in **Figure 3.2**.

Figure 3.1 – Existing Turning Movement Counts

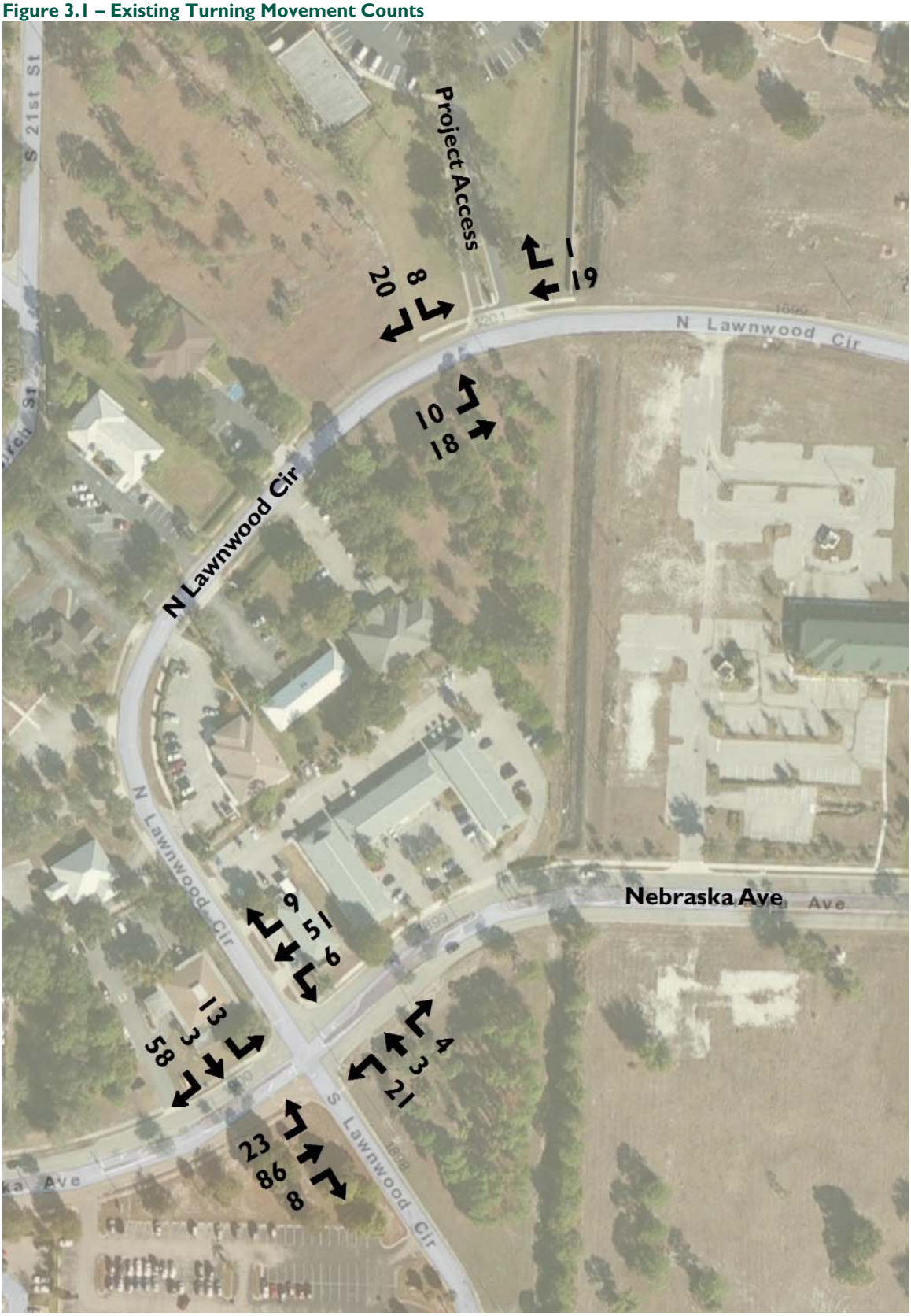
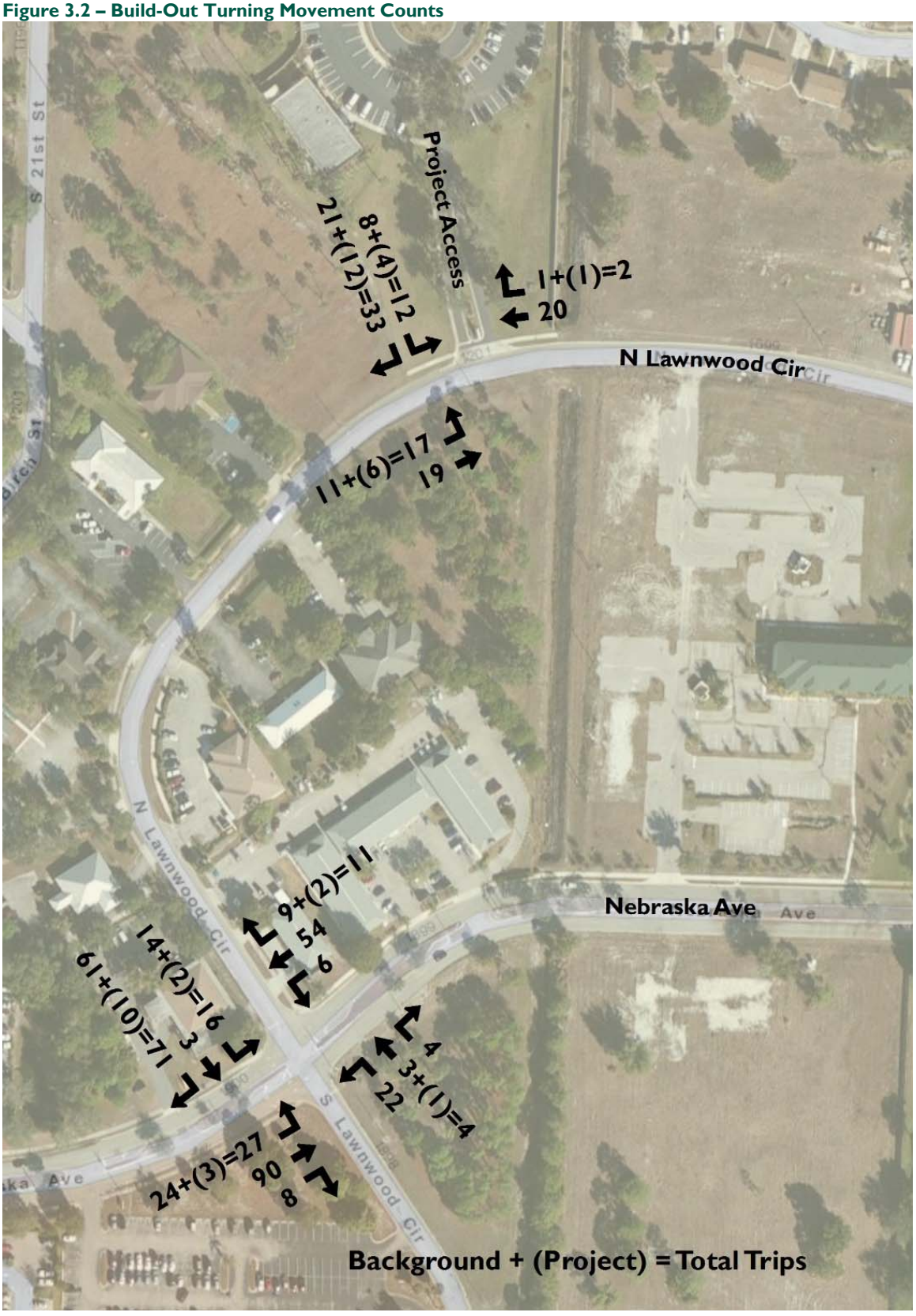


Figure 3.2 – Build-Out Turning Movement Counts



4.0 Analysis

4.1 Roadway Analysis

The existing AADT, k-factor, and d-factor for the roadways in the study area was compiled from the St. Lucie TPO Traffic Count Data Management System (peak-hour peak-direction volumes for Lawnwood Circle determined from traffic counts). For each segment, the k-factor and d-factor was calculated and the peak direction determined from count data from 2014. The FDOT Quality/Level of Service Handbook (2012), Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas (Table 7), was applied to determine the existing level of service for each roadway. The existing (2014) traffic volumes indicate that all roadways included in the study area operate at an acceptable level of service, as shown in **Table 4.1**.

Table 4.1 – Existing Roadway Analysis (2014)

Roadway	Segment	# of Lanes	LOS Std.	Peak Dir.	Service Volume @ Standard	AADT (2014)	Peak Hr./ Peak Dir. Volume	Committed Trips	Total Volume	LOS
Lawnwood Cir	Nebraska Ave to Project Site	2	D	SB	750	-	75	0	75	C
Nebraska Ave	25th St to 13th St	4	D	WB	1,630	3,800	231	46	277	C
13th St	Virginia Ave to Nebraska Ave	2	D	NB	640	6,937	599	7	606	D
	Nebraska Ave to Georgia Ave	2	D	NB	714	6,937	320	162	482	D
25th St	Virginia Ave to Nebraska Ave	4	D	NB	2,000	21,603	1,064	0	1,064	C
	Nebraska Ave to Okeechobee Rd	4	D	NB	2,000	21,603	1,340	8	1,348	C

Source: St. Lucie Transportation Planning Organization Traffic Counts and Level of Service Report Fall 2014; FDOT Q/LOS Handbook; Littlejohn

Background growth was applied to the combination of existing volumes and committed trips shown in the St. Lucie TPO Traffic Counts and LOS Report to determine the future background volume for each segment. The projected project trips were also added onto each segment. The projected background growth causes the segment of 13th Street from Virginia Avenue to Nebraska Avenue to surpass the Level of Service (LOS) standard for the roadway by three (3) vehicles. However, due the low distribution assigned to this segment in the regional model and the low trip generation for the proposed addition, no peak-hour peak-direction trips were assigned to this segment, and thus the projected background deficiency has no impact on the concurrency of the proposed addition. As shown in **Table 4.2**, all segments in which project trips are present are projected to have sufficient capacity for both the increase in background trips and the additional trips projected for the proposed addition.

Table 4.2 – Build-Out Roadway Analysis (2020)

Roadway	Segment	Service Volume @ Standard	AADT (2020)	Background		Build-Out			
				Volume	LOS	Project Distribution	Project Trips	Total Volume	LOS
Lawnwood Cir	Nebraska Ave to Project Site	750	-	79	C	100%	16	95	C
Nebraska Ave	25th St to Lawnwood Cir	1,630	4,034	294	C	61%	10	304	C
	Lawnwood Cir to 13th St	1,630	4,034	294	C	39%	6	300	C
13th St	Virginia Ave to Nebraska Ave	640	7,364	643	F	6%	0	643	F
	Nebraska Ave to Georgia Ave	714	7,364	512	D	23%	4	516	D
25th St	Virginia Ave to Nebraska Ave	2,000	22,932	1,129	C	26%	2	1,131	C
	Nebraska Ave to Okeechobee Rd	2,000	22,932	1,431	C	30%	5	1,436	C

Source: St. Lucie Transportation Planning Organization Traffic Counts and Level of Service Report Fall 2014; FDOT Q/LOS Handbook; Littlejohn

4.2 Intersection Analysis

Each of the existing study intersections were evaluated with the existing geometrics using the Highway Capacity Software (HCS 2010). The details of the intersection analysis results are shown in **Table 4.3** and copies of the HCS analysis printouts are included in **Appendix D**. As shown in the analysis, the study area intersections all operate at an acceptable level of service in all condition, with no mitigation necessary in the background or build-out scenarios. The addition of project trips to the study area intersections increase delays by no more than 0.2 seconds on any approach.

Table 4.3 – Intersection Level of Service

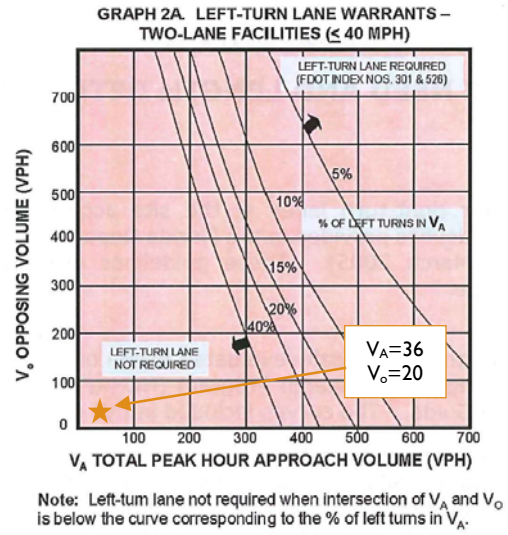
Intersection	Stop Control	Intersection Conditions	Approach			
			EB	WB	NB	SB
Existing Scenario (2015)						
Lawnwood Cir @ Site Driveway	TWSC	LOS	A	-		A
		Delay (sec/veh)	7.3	-		8.7
Nebraska Ave @ Lawnwood Circle	TWSC	LOS	A	A	B	A
		Delay (sec/veh)	7.4	7.4	10.4	9.2
Background Scenario (2020)						
Lawnwood Cir @ Site Driveway	TWSC	LOS	A	-		A
		Delay (sec/veh)	7.3	-		8.7
Nebraska Ave @ Lawnwood Circle	TWSC	LOS	A	A	B	A
		Delay (sec/veh)	7.4	7.4	10.5	9.3
Future Scenario (2020)						
Lawnwood Cir @ Site Driveway	TWSC	LOS	A	-		A
		Delay (sec/veh)	7.3	-		8.9
Nebraska Ave @ Lawnwood Circle	TWSC	LOS	A	A	B	A
		Delay (sec/veh)	7.5	7.4	10.6	9.4

Source: Littlejohn Engineering Associates

4.3 Turn Lane Analysis

The need for turn lanes into the project site was evaluated using the FDOT Driveway Handbook (2008) for right-turn lanes and National Cooperative Highway Research Program (NCHRP) Report 279 for left-turn lanes. At the project site, there are only 2 right-turns into the site projected based on the existing distribution of project trips into and out of the site, which does not meet the guideline of 125 vehicles per the Driveway Handbook. Approximately 50% of the approach volume is left-turns into the project site; however, with an approach volume of 36 vehicles, and an opposing volume of 20 vehicles, the volumes are substantially below the curves in NCHRP Report 279 for requiring a left-turn lane, as shown in **Figure 4.1**.

Figure 4.1 – Left-Turn Lane Warrant



Note: Left-turn lane not required when intersection of V_A and V_O is below the curve corresponding to the % of left turns in V_A.

Based on the criteria from the FDOT Driveway Handbook and NCHRP Report 279, neither an exclusive right-turn lane nor left-turn lane are needed for the project access.

5.0 Findings and Recommendations

Based on the analysis presented within this study report, the proposed addition to the Lawnwood Pavilion will not have a significant impact on the roadway network. Intersection operations at the project site access and at the primary connection from the project site to the major roadway network are projected to operate at LOS A or B for all approaches in all of the scenarios analyzed, with no more than a 0.2 seconds of delay per vehicle change between any two scenarios. The roadways surrounding the project site are projected to have sufficient capacity to incorporate the project trips assigned to each segment using the regional planning model. While the segment of 13th Street from Virginia Avenue to Nebraska Avenue is projected to exceed the service volume capacity with the addition of background growth (by 3 vehicles, or 0.5% of the service volume capacity), this segment was included for informational purposes only (not required by the study area guidance in the TIS Methodology and Procedures), and is not projected to have any volume from the new development due to the combination of a low model distribution assigned to this segment and low trip generation for the proposed addition. Thus, the project has no responsibility for any projected deficiencies on this segment.

Appendix A

Treasure Coast Regional Planning Model Distribution

Lawnwood RMC
Project Distribution



T:\Projects\GTCRPM34\Base\Lawnwood RMC\OUTPUT\FINAL_LOADED_A05.NET
5/5/2015 10:27 AM

(Licensed to Littlejohn Engineering Associates)

Appendix B

Turning Movement Counts

Accurate Traffic Counts, Inc.

798 Executive Drive, Suite A
Oviedo, Florida 32765
info@accuratetraffic.com

Counter: 5707
Counted by: Nino
Weather: Clear
Location:1806 Lawnwood Cir at Medical Cn

File Name : Lawnwood Circle at Lawnwood Regional Medical Center
Site Code : 00005707
Start Date : 4/28/2015
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn Traffic

	Lawnwood Regional Medical Center Southbound				Lawnwood Circle Westbound				Northbound				Lawnwood Circle Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
16:00	2	0	5	7	0	3	0	3	0	0	0	0	3	3	0	6	16
16:15	1	0	6	7	0	6	0	6	0	0	0	0	3	9	0	12	25
16:30	5	0	7	12	0	6	0	6	0	0	0	0	3	5	0	8	26
16:45	0	0	2	2	0	4	1	5	0	0	0	0	1	1	0	2	9
Total	8	0	20	28	0	19	1	20	0	0	0	0	10	18	0	28	76
17:00	0	0	4	4	0	1	1	2	0	0	0	0	2	4	0	6	12
17:15	1	0	4	5	0	6	0	6	0	0	0	0	3	9	0	12	23
17:30	0	0	1	1	0	4	0	4	0	0	0	0	4	6	0	10	15
17:45	4	0	1	5	0	3	0	3	0	0	0	0	1	1	0	2	10
Total	5	0	10	15	0	14	1	15	0	0	0	0	10	20	0	30	60
Grand Total	13	0	30	43	0	33	2	35	0	0	0	0	20	38	0	58	136
Apprch %	30.2	0	69.8		0	94.3	5.7		0	0	0		34.5	65.5	0		
Total %	9.6	0	22.1	31.6	0	24.3	1.5	25.7	0	0	0	0	14.7	27.9	0	42.6	
General Traffic	13	0	29	42	0	32	2	34	0	0	0	0	20	37	0	57	133
% General Traffic																	
Truck Traffic	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
% Truck Traffic	0	0	3.3	2.3	0	3	0	2.9	0	0	0	0	0	2.6	0	1.7	2.2
U-Turn Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% U-Turn Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Lawnwood Regional Medical Center Southbound				Lawnwood Circle Westbound				Northbound				Lawnwood Circle Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:00																	
16:00	2	0	5	7	0	3	0	3	0	0	0	0	**3**	3	0	6	16
16:15	1	0	6	7	0	**6**	0	**6**	0	0	0	0	3	**9**	0	**12**	25
16:30	**5**	0	**7**	**12**	0	6	0	6	0	0	0	0	3	5	0	8	**26**
16:45	0	0	2	2	0	4	**1**	5	0	0	0	0	1	1	0	2	9
Total Volume	8	0	20	28	0	19	1	20	0	0	0	0	10	18	0	28	76
% App. Total	28.6	0	71.4		0	95	5		0	0	0		35.7	64.3	0		
PHF	.400	.000	.714	.583	.000	.792	.250	.833	.000	.000	.000	.000	.833	.500	.000	.583	.731

Accurate Traffic Counts, Inc.

798 Executive Drive, Suite A
Oviedo, Florida 32765
info@accuratetraffic.com

Counter: 5707
Counted by: Nino
Weather: Clear
Location:1806 Lawnwood Cir at Medical Cn

File Name : Lawnwood Circle at Lawnwood Regional Medical Center
Site Code : 00005707
Start Date : 4/28/2015
Page No : 1

Groups Printed- Truck Traffic

	Lawnwood Regional Medical Center Southbound				Lawnwood Circle Westbound				Northbound				Lawnwood Circle Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
16:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
*** BREAK ***																	
Total	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
*** BREAK ***																	
Grand Total	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Apprch %	0	0	100		0	100	0		0	0	0		0	100	0		
Total %	0	0	33.3	33.3	0	33.3	0	33.3	0	0	0	0	0	33.3	0	33.3	

Accurate Traffic Counts, Inc.

798 Executive Drive, Suite A
Oviedo, Florida 32765
info@accuratetraffic.com

Counter: 1897
Counted by: Ramón
Weather: Clear
Location:Lawnwood Cir at Nebrasca Av

File Name : Lawnwood Circle at Nebrasca Ave
Site Code : 00001897
Start Date : 4/28/2015
Page No : 1

Groups Printed- General Traffic - Truck Traffic - Turn Traffic

	N Lawnwood Circle Southbound				Nebraska Ave Westbound				S Lawnwood Circle Northbound				Nebraska Ave Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
16:00	6	0	19	25	2	12	4	18	5	2	3	10	5	26	6	37	90
16:15	2	1	16	19	2	16	2	20	5	1	1	7	9	26	0	35	81
16:30	3	1	15	19	2	15	2	19	6	0	0	6	6	23	2	31	75
16:45	2	1	9	12	0	9	1	10	5	0	0	5	3	13	0	16	43
Total	13	3	59	75	6	52	9	67	21	3	4	28	23	88	8	119	289
17:00	3	1	12	16	1	15	1	17	2	1	0	3	6	20	2	28	64
17:15	2	0	19	21	0	23	3	26	4	0	1	5	9	25	4	38	90
17:30	0	0	13	13	1	7	3	11	5	1	1	7	6	31	1	38	69
17:45	2	0	13	15	0	20	0	20	6	0	1	7	2	17	3	22	64
Total	7	1	57	65	2	65	7	74	17	2	3	22	23	93	10	126	287
Grand Total	20	4	116	140	8	117	16	141	38	5	7	50	46	181	18	245	576
Apprch %	14.3	2.9	82.9		5.7	83	11.3		76	10	14		18.8	73.9	7.3		
Total %	3.5	0.7	20.1	24.3	1.4	20.3	2.8	24.5	6.6	0.9	1.2	8.7	8	31.4	3.1	42.5	
General Traffic	19	4	115	138	4	114	16	134	38	4	7	49	44	180	17	241	562
% General Traffic																	
Truck Traffic	1	0	1	2	0	3	0	3	0	1	0	1	1	1	1	3	9
% Truck Traffic	5	0	0.9	1.4	0	2.6	0	2.1	0	20	0	2	2.2	0.6	5.6	1.2	1.6
U-Turn Traffic	0	0	0	0	4	0	0	4	0	0	0	0	1	0	0	1	5
% U-Turn Traffic	0	0	0	0	50	0	0	2.8	0	0	0	0	2.2	0	0	0.4	0.9

	N Lawnwood Circle Southbound				Nebraska Ave Westbound				S Lawnwood Circle Northbound				Nebraska Ave Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:00																	
16:00	**6**	0	**19**	**25**	**2**	12	**4**	18	5	**2**	**3**	**10**	5	**26**	**6**	**37**	**90**
16:15	2	**1**	16	19	2	**16**	2	**20**	5	1	1	7	**9**	26	0	35	81
16:30	3	1	15	19	2	15	2	19	**6**	0	0	6	6	23	2	31	75
16:45	2	1	9	12	0	9	1	10	5	0	0	5	3	13	0	16	43
Total Volume	13	3	59	75	6	52	9	67	21	3	4	28	23	88	8	119	289
% App. Total	17.3	4	78.7		9	77.6	13.4		75	10.7	14.3		19.3	73.9	6.7		
PHF	.542	.750	.776	.750	.750	.813	.563	.838	.875	.375	.333	.700	.639	.846	.333	.804	.803

Accurate Traffic Counts, Inc.

798 Executive Drive, Suite A
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Counter: 1897
Counted by: Ramón
Weather: Clear
Location:Lawnwood Cir at Nebrasca Av

File Name : Lawnwood Circle at Nebrasca Ave
Site Code : 00001897
Start Date : 4/28/2015
Page No : 1

Groups Printed- Truck Traffic

	N Lawnwood Circle Southbound				Nebraska Ave Westbound				S Lawnwood Circle Northbound				Nebraska Ave Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
16:00	0	0	1	1	0	1	0	1	0	0	0	0	0	0	1	1	3
16:15	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																	
Total	1	0	1	2	0	2	0	2	0	1	0	1	1	0	1	2	7
17:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
*** BREAK ***																	
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
*** BREAK ***																	
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Grand Total	1	0	1	2	0	3	0	3	0	1	0	1	1	1	1	3	9
Apprch %	50	0	50		0	100	0		0	100	0		33.3	33.3	33.3		
Total %	11.1	0	11.1	22.2	0	33.3	0	33.3	0	11.1	0	11.1	11.1	11.1	11.1	33.3	

Appendix C

Peak Season Factor Category Report

2013 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 9400 EAST-A1A TO US1

MOCF: 0.89

WEEK	DATES	SF	PSCF
1	01/01/2013 - 01/05/2013	1.02	1.15
2	01/06/2013 - 01/12/2013	0.98	1.10
3	01/13/2013 - 01/19/2013	0.94	1.06
* 4	01/20/2013 - 01/26/2013	0.93	1.04
* 5	01/27/2013 - 02/02/2013	0.91	1.02
* 6	02/03/2013 - 02/09/2013	0.90	1.01
* 7	02/10/2013 - 02/16/2013	0.88	0.99
* 8	02/17/2013 - 02/23/2013	0.87	0.98
* 9	02/24/2013 - 03/02/2013	0.86	0.97
*10	03/03/2013 - 03/09/2013	0.86	0.97
*11	03/10/2013 - 03/16/2013	0.86	0.97
*12	03/17/2013 - 03/23/2013	0.86	0.97
*13	03/24/2013 - 03/30/2013	0.87	0.98
*14	03/31/2013 - 04/06/2013	0.89	1.00
*15	04/07/2013 - 04/13/2013	0.90	1.01
*16	04/14/2013 - 04/20/2013	0.92	1.03
17	04/21/2013 - 04/27/2013	0.95	1.07
18	04/28/2013 - 05/04/2013	0.98	1.10
19	05/05/2013 - 05/11/2013	1.01	1.13
20	05/12/2013 - 05/18/2013	1.04	1.17
21	05/19/2013 - 05/25/2013	1.05	1.18
22	05/26/2013 - 06/01/2013	1.06	1.19
23	06/02/2013 - 06/08/2013	1.07	1.20
24	06/09/2013 - 06/15/2013	1.08	1.21
25	06/16/2013 - 06/22/2013	1.10	1.24
26	06/23/2013 - 06/29/2013	1.10	1.24
27	06/30/2013 - 07/06/2013	1.10	1.24
28	07/07/2013 - 07/13/2013	1.10	1.24
29	07/14/2013 - 07/20/2013	1.11	1.25
30	07/21/2013 - 07/27/2013	1.11	1.25
31	07/28/2013 - 08/03/2013	1.11	1.25
32	08/04/2013 - 08/10/2013	1.10	1.24
33	08/11/2013 - 08/17/2013	1.10	1.24
34	08/18/2013 - 08/24/2013	1.10	1.24
35	08/25/2013 - 08/31/2013	1.11	1.25
36	09/01/2013 - 09/07/2013	1.12	1.26
37	09/08/2013 - 09/14/2013	1.12	1.26
38	09/15/2013 - 09/21/2013	1.13	1.27
39	09/22/2013 - 09/28/2013	1.11	1.25
40	09/29/2013 - 10/05/2013	1.09	1.22
41	10/06/2013 - 10/12/2013	1.07	1.20
42	10/13/2013 - 10/19/2013	1.06	1.19
43	10/20/2013 - 10/26/2013	1.05	1.18
44	10/27/2013 - 11/02/2013	1.05	1.18
45	11/03/2013 - 11/09/2013	1.04	1.17
46	11/10/2013 - 11/16/2013	1.04	1.17
47	11/17/2013 - 11/23/2013	1.04	1.17
48	11/24/2013 - 11/30/2013	1.03	1.16
49	12/01/2013 - 12/07/2013	1.03	1.16
50	12/08/2013 - 12/14/2013	1.02	1.15
51	12/15/2013 - 12/21/2013	1.02	1.15
52	12/22/2013 - 12/28/2013	0.98	1.10
53	12/29/2013 - 12/31/2013	0.94	1.06

* PEAK SEASON

Appendix D

HCS Analysis Printouts

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*SLS*
Agency/Co.	*Littlejohn*
Date Performed	*4/30/2015*
Analysis Time Period	*PM Peak*

Site Information

Intersection	*1*
Jurisdiction	*Ft. Pierce*
Analysis Year	*2015*

Project Description *20150322 - Lawnwood Pavilion Rehab Addition*

East/West Street: *Lawnwood Cir* | North/South Street: *Site Access*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*10*	*18*			*19*	*1*
Peak-Hour Factor, PHF	*0.73*	*0.73*	*1.00*	*1.00*	*0.73*	*0.73*
Hourly Flow Rate, HFR (veh/h)	*13*	*24*	*0*	*0*	*26*	*1*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*8*		*20*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.73*	*1.00*	*0.73*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*10*	*0*	*27*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (veh/h)	*13*						*37*	
C (m) (veh/h)	*1600*						*1017*	
v/c	*0.01*						*0.04*	
95% queue length	*0.02*						*0.11*	
Control Delay (s/veh)	*7.3*						*8.7*	
LOS	*A*						*A*	
Approach Delay (s/veh)	--	--				*8.7*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*SLS*
Agency/Co.	*Littlejohn*
Date Performed	*4/30/2015*
Analysis Time Period	*PM Peak*

Site Information

Intersection	*2*
Jurisdiction	*Ft. Pierce*
Analysis Year	*2015*

Project Description *20150322 - Lawnwood Pavilion Rehab Addition*

East/West Street: *Nebraska Ave* | North/South Street: *Lawnwood Cir*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*23*	*86*	*8*	*6*	*51*	*9*
Peak-Hour Factor, PHF	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*
Hourly Flow Rate, HFR (veh/h)	*28*	*107*	*9*	*7*	*63*	*11*
Percent Heavy Vehicles	*4*	--	--	*0*	--	--
Median Type	*Raised curb*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*1*	*2*	*0*
Configuration	*L*	*T*	*TR*	*L*	*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*21*	*3*	*4*	*13*	*3*	*58*
Peak-Hour Factor, PHF	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*
Hourly Flow Rate, HFR (veh/h)	*26*	*3*	*4*	*16*	*3*	*72*
Percent Heavy Vehicles	*0*	*33*	*0*	*8*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (veh/h)	*28*	*7*		*33*			*91*	
C (m) (veh/h)	*1509*	*1485*		*699*			*942*	
v/c	*0.02*	*0.00*		*0.05*			*0.10*	
95% queue length	*0.06*	*0.01*		*0.15*			*0.32*	
Control Delay (s/veh)	*7.4*	*7.4*		*10.4*			*9.2*	
LOS	*A*	*A*		*B*			*A*	
Approach Delay (s/veh)	--	--	*10.4*			*9.2*		
Approach LOS	--	--	*B*			*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*SLS*
Agency/Co.	*Littlejohn*
Date Performed	*4/30/2015*
Analysis Time Period	*PM Peak*

Site Information

Intersection	*1*
Jurisdiction	*Ft. Pierce*
Analysis Year	*2015*

Project Description *20150322 - Lawnwood Pavilion Rehab Addition*

East/West Street: *Lawnwood Cir* | North/South Street: *Site Access*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*11*	*19*			*20*	*1*
Peak-Hour Factor, PHF	*0.73*	*0.73*	*1.00*	*1.00*	*0.73*	*0.73*
Hourly Flow Rate, HFR (veh/h)	*15*	*26*	*0*	*0*	*27*	*1*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*8*		*21*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.73*	*1.00*	*0.73*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*10*	*0*	*28*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*5*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (veh/h)	*15*						*38*	
C (m) (veh/h)	*1599*						*1003*	
v/c	*0.01*						*0.04*	
95% queue length	*0.03*						*0.12*	
Control Delay (s/veh)	*7.3*						*8.7*	
LOS	*A*						*A*	
Approach Delay (s/veh)	--	--				*8.7*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*SLS*
Agency/Co.	*Littlejohn*
Date Performed	*4/30/2015*
Analysis Time Period	*PM Peak*

Site Information

Intersection	*2*
Jurisdiction	*Ft. Pierce*
Analysis Year	*2015*

Project Description *20150322 - Lawnwood Pavilion Rehab Addition*

East/West Street: *Nebraska Ave* | North/South Street: *Lawnwood Cir*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*24*	*90*	*8*	*6*	*54*	*9*
Peak-Hour Factor, PHF	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*
Hourly Flow Rate, HFR (veh/h)	*29*	*112*	*9*	*7*	*67*	*11*
Percent Heavy Vehicles	*4*	--	--	*0*	--	--
Median Type	*Raised curb*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*1*	*2*	*0*
Configuration	*L*	*T*	*TR*	*L*	*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*22*	*3*	*4*	*14*	*3*	*61*
Peak-Hour Factor, PHF	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*
Hourly Flow Rate, HFR (veh/h)	*27*	*3*	*4*	*17*	*3*	*76*
Percent Heavy Vehicles	*0*	*33*	*0*	*8*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (veh/h)	*29*	*7*		*34*			*96*	
C (m) (veh/h)	*1504*	*1479*		*690*			*938*	
v/c	*0.02*	*0.00*		*0.05*			*0.10*	
95% queue length	*0.06*	*0.01*		*0.16*			*0.34*	
Control Delay (s/veh)	*7.4*	*7.4*		*10.5*			*9.3*	
LOS	*A*	*A*		*B*			*A*	
Approach Delay (s/veh)	--	--	*10.5*			*9.3*		
Approach LOS	--	--	*B*			*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*SLS*
Agency/Co.	*Littlejohn*
Date Performed	*4/30/2015*
Analysis Time Period	*PM Peak*

Site Information

Intersection	*1*
Jurisdiction	*Ft. Pierce*
Analysis Year	*2015*

Project Description *20150322 - Lawnwood Pavilion Rehab Addition*

East/West Street: *Lawnwood Cir* | North/South Street: *Site Access*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*17*	*19*			*20*	*2*
Peak-Hour Factor, PHF	*0.73*	*0.73*	*1.00*	*1.00*	*0.73*	*0.73*
Hourly Flow Rate, HFR (veh/h)	*23*	*26*	*0*	*0*	*27*	*2*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*12*		*33*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.73*	*1.00*	*0.73*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*16*	*0*	*45*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*5*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (veh/h)	*23*						*61*	
C (m) (veh/h)	*1597*						*996*	
v/c	*0.01*						*0.06*	
95% queue length	*0.04*						*0.20*	
Control Delay (s/veh)	*7.3*						*8.9*	
LOS	*A*						*A*	
Approach Delay (s/veh)	--	--				*8.9*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*SLS*
Agency/Co.	*Littlejohn*
Date Performed	*4/30/2015*
Analysis Time Period	*PM Peak*

Site Information

Intersection	*2-Build-Out*
Jurisdiction	*Ft. Pierce*
Analysis Year	*2020*

Project Description *20150322 - Lawnwood Pavilion Rehab Addition*

East/West Street: *Nebraska Ave* | North/South Street: *Lawnwood Cir*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*27*	*90*	*8*	*6*	*54*	*11*
Peak-Hour Factor, PHF	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*
Hourly Flow Rate, HFR (veh/h)	*33*	*112*	*9*	*7*	*67*	*13*
Percent Heavy Vehicles	*4*	--	--	*0*	--	--
Median Type	*Raised curb*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*1*	*2*	*0*
Configuration	*L*	*T*	*TR*	*L*	*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*22*	*4*	*4*	*16*	*3*	*71*
Peak-Hour Factor, PHF	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*	*0.80*
Hourly Flow Rate, HFR (veh/h)	*27*	*4*	*4*	*19*	*3*	*88*
Percent Heavy Vehicles	*0*	*33*	*0*	*8*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration		*LTR*			*LTR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*	*L*		*LTR*			*LTR*	
v (veh/h)	*33*	*7*		*35*			*110*	
C (m) (veh/h)	*1501*	*1479*		*674*			*937*	
v/c	*0.02*	*0.00*		*0.05*			*0.12*	
95% queue length	*0.07*	*0.01*		*0.16*			*0.40*	
Control Delay (s/veh)	*7.5*	*7.4*		*10.6*			*9.4*	
LOS	*A*	*A*		*B*			*A*	
Approach Delay (s/veh)	--	--	*10.6*			*9.4*		
Approach LOS	--	--	*B*			*A*		

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CITY OF FORT PIERCE

PLANNING DEPARTMENT

REBECCA GROHALL, AICP, PLANNING MANAGER
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

TO: George Huddleston; Darryl DeYoung

FROM: Clarissa Davis, Planner

RE: Lawnwood Pavilion; Conditional Use w/ New Construction & Design Review

DATE: May 18, 2015

Mr. Huddleston,

I have reviewed the proposed Lawnwood Pavilion application and have produced the following comments:

1. Square footage of addition is inconsistent between plans and applications. Please clarify.

2. Landscape plan does not describe height of implemented trees and shrubs. Please provide.

   Code Section 22-187(1)a - Trees used to meet the requirements of this section shall be species which when planted have a height of at least twelve (12) feet and have trunks which can be maintained in a clean condition for over five (5) feet of clear wood. At planting, the trees shall have a diameter of at least two and one-half (2½) inches at a point four and one-half (4½) feet above ground level and a spread of at least five (5) feet (except for palms which shall have a minimum clear trunk of ten (10) feet).

3. Additional trees in east property line needed.

   Code Section 22-187(4)b - The landscape strip shall include an average of at least one tree for each three hundred (300) square feet of required landscaped area. The remainder of the required landscaped area shall be completely covered with grass, ground cover or other landscaped treatment and shall additionally contain a screen of landscaping which shall be installed and maintained so as to form a thirty-six-inch or higher continuous, unbroken, solid, visual screen within a maximum of one year after the landscaping takes place, except in clear vision areas required in section 22-53.

4. Conceptual Irrigation plan not provided.

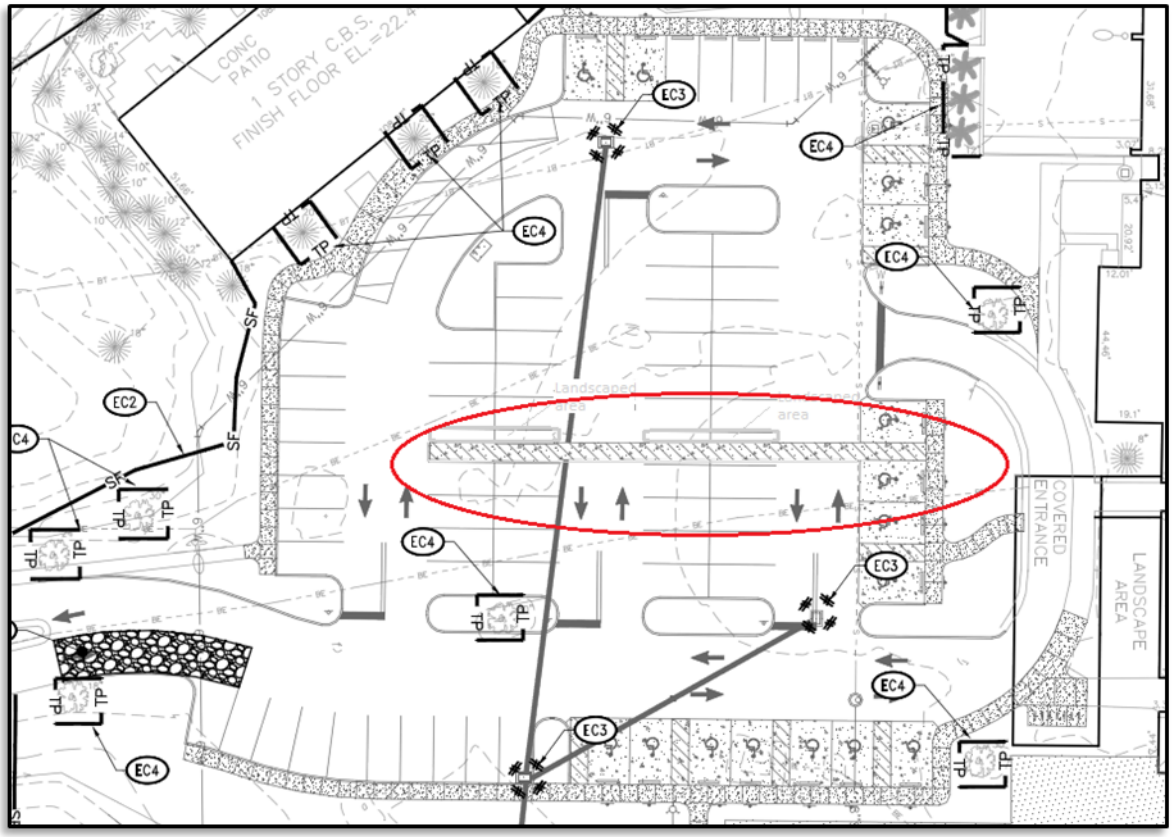
5. Possible relocation of proposed “oxygen park”. Also, clarification of use needed.

6. Combined aisle/stall is insufficient by 2'. Proposed combined width is described as 62'. Please revise.

   Code Section 22-60(c)(5)b - Combined aisle and stall width. All off-street parking areas shall be constructed with the following minimum dimensions based upon the angle of the parking stall

b.	Two-way traffic			30 degree	45 degree	60 degree	90 degree
	1.	Stalls one side	28	40	42	44	45
	2.	Stalls both sides	38	54	60	62	64

7. Recommended Suggestion: Pedestrian pathway provided for perimeter parking, however, pathway for interior parking area should be provided. (Example below).



This review is merely preliminary. Official comments will be rendered at the time of building permit. If you have any questions about the review above please feel free to contact me.

Sincerely,



Clarissa Davis, Planner
(772) 467-3742
CDavis@City-FortPerice.com

From the Desk of

Marc Meyers, C.B.O.
Building Official
City of Fort Pierce
100 North U.S. 1
Post Office Box 1480
Fort Pierce, Florida 34954
T: 772-467-3000
F: 772-467-9836
MarcMeyers@city-ftpierce.com

TO: Clarissa Davis, Planner

DATE: May 21, 2015

RE: Comments for TRC Meeting, May 21, 2015

As I will be unable to attend, please find my comments relating to the "New Business" planned agenda:

A. Site Plan – Lawnwood Pavilion Expansion, 1860 N. Lawnwood

- Main Addition Building Permit
- Generator Enclosure Building Permit
- New Generator?
- Oxygen Park? Separate Permit (UG piping to building?)
- Sitework Permit
- Additional Parking
- Flag Pole/Foundation Permit?
- Enlarge Electrical Rooms? In Existing Buildings?
- New Site Lighting? Part of this or another project?

CITY OF FORT PIERCE
DEPARTMENT OF ENGINEERING

Roadway Design, Engineering Reviews, Stormwater Utility Management, Project Management, Traffic Control and Maintenance

INTEROFFICE MEMORANDUM

RECEIVED
MAY 22 2015
CITY OF FORT PIERCE
PLANNING & ZONING

TO: Clarissa Davis, Planner

FROM: John R. Andrews, P.E., City Engineer

SUBJECT: **Lawnwood Pavilion Expansion – Site Plan w/ CU**
1850 N. Lawnwood Circle
Technical Review Project No. 15-07000002

DATE: May 22, 2015

Attachment(s):

This is to advise you that we have completed the review of the following documents as received on May 13, 2015:

- ☑ Conditional Use Application & Site Plan
- ☐ Test Reports & Related Documents
- ☐ Record Drawings
- ☐ Clearances from all applicable Local, State and Federal Agencies
- ☐ P/D Drawings & Approved Site Plan
- ☐ Certificate of Completion
- ☐ Permits from applicable Local, State & Federal Agencies

Based on our reviews and appropriate site final inspection, we ☑ Recommend ☐ Do Not Recommend

☑ Approval w/ comments ☐ Building Permit ☐ C/O

Developer, Owner, Engineer, Contractor and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for the compliance with other City department requirements and all approved documents, as well as Local, State and Federal regulations. The development requirements for this project may necessitate additional construction requirements that are not subject to this department's review for approval.

☑ See attached for engineering comments

P.O. BOX 1480 ◊ FORT PIERCE, FL 34954-1480 ◊ 772-467-3774

The following comments shall be addressed prior City Commission project approval:

1. Revise the parking access aisle width from 24' to 26' as stipulated in the City of Fort Pierce Code of Ordinances Section 22-60(c)(5).
2. The drainage plan was reviewed conceptually and will be thoroughly appraised at the time of the Site Work Permit application. The applicant's engineer shall be cognizant that all proposed drainage pipes are to have a 15" minimum diameter and be either aluminum or reinforced concrete in accordance with the City of Fort Pierce Code of Ordinances Section 17-28(b).
3. Add a note to the site engineering plan stating that all construction shall comply with the City of Fort Pierce Code of Ordinances Sections 17 and 22.

JRA/tst

Lawnwood Pavilion Expansion
Conditional Use/Site Plan
May 14, 2015

St. Lucie County Public Works/Engineering Comments

1. The streets and right of ways are under the jurisdiction of the City of Ft. Pierce.
2. It is noted that the Boundary survey included within the submittal package has a spelling error. The word “detension” area should be spelled detention.
3. It is noted that the POB of the legal description has not been indicated on the survey.
4. It is noted that the proposed addition will be located on top of an existing 18” sanitary sewer line. Will the City allow this?
5. Sheet C2.0; Site Grading and Erosion Control Notes; It is noted that within note #2 the reference to the FEMA Panel number is not correct.
6. Sheet C2.0; Site Grading and Erosion Control Notes; It is noted that within note #33 there is a spelling error, “ben” should be been.
7. Sheet C2.0; General Control Notes; It is noted that note #2 indicates that the site layout is based on the points noted. Have these points been field staked?
8. Sheet C2.0; Building Coverage Table; Tables indicate the proposed building is 12,378 sq. ft. It is noted Sheet C5.0 indicates the proposed addition will be 11,570 sq. ft.
9. Sheet C4.0; Demolition Plan; Will the buried electric line located below the proposed building be removed or left in place?
10. Sheet C5.0; It is noted that the coordinate values indicated appear to be based on assumed datum. The source of datum should be clearly noted on the plans as well as the point of origin.
11. Sheet C6.0; It is noted storm sewer pipe lengths and sizes have not been indicated for a number of pipe runs.
12. Sheet C6.0; Proposed Storm Sewer Structure Table; A3 is noted as an existing structure. I am unable to locate this structure on the survey provided.

Ron Harris
County Surveyor
772 462-1721

Littlejohn

May 28, 2015

Ms. Clarissa Davis
Planning Department
City of Fort Pierce
PO Box 1480
Fort Pierce, FL 34954

RE: Lawnwood Physical Rehabilitation Center Expansion
City of Fort Pierce Comment Response
Fort Pierce, FL
Project No. 20150322

Dear Ms. Davis:

Littlejohn Engineering Associates, Inc. (Littlejohn) has prepared the following comment responses for the City of Fort Pierce regarding the Lawnwood Medical Center Expansion & Renovation project.

Planning Department

1. Square footage of addition is inconsistent between plans and applications. Please clarify.
   - *Square footage has been revised to provide consistency. The proposed addition is 13,412 sq. ft. Please see Sheet C5.0.*
2. Landscape plan does not describe height of implemented trees and shrubs. Please provide.
   - *The height of the proposed trees and shrubs has been added to Sheet L1.0.*
3. Additional trees in east property line needed.
   - *As discussed, the current buffer along South 21st Street is more bare than the east property line. A landscape buffer that complies with Sec. 22-187(4) has been added to Sheet L1.0.*
4. Conceptual Irrigation plan not provided.
   - *Irrigation plans have been included with this re-submittal. Please see Sheets I1.0, I2.0 and I2.1.*
5. Possible relocation of proposed "oxygen park". Also, clarification of use needed.
   - *After coordination with the City of Fort Pierce, the oxygen park will stay in the same location as previously proposed. The oxygen park will be filled once a month during off-hours to reduce the amount of traffic blockage. The filling will last approximately 30 minutes and the driver will park in a manner that will cause the least amount of obstruction to the private drive aisle.*
6. Combined aisle/stall is insufficient by 2'. Proposed combined width is described as 62'. Please revise.
   - *Drive aisles have been widened from 24' to 26' to meet the 64' minimum requirement. Please see Sheet C5.0.*

1615 EDGEWATER DRIVE, SUITE 180, ORLANDO, FLORIDA 32804
T 407.975.1273 F 407.975.1278

Nashville | Chattanooga | Decatur | Huntsville | Knoxville | Orlando | Phoenix | Tri-Cities

www.leainc.com

Engineering
Planning
Landscape Architecture
Land Surveying
Environmental Services
Health and Safety
Economic Development

7. Recommended Suggestion: Pedestrian pathway provided for perimeter parking, however, pathway for interior parking area should be provided.
   - *Sidewalk connection has been added from generator enclosure to patient parking and staff parking to complete perimeter accessibility. Interior pedestrian pathway was considered but was unobtainable due to the proposed parking being at code minimum. Please see Sheet C5.0.*

St. Lucie County Public Works/Engineering Comments

1. The streets and right of ways are under the jurisdiction of the City of Ft. Pierce.
   - *This is understood.*
2. It is noted that the Boundary survey included within the submittal package has a spelling error. The word "detension" area should be spelled detention.
   - *Comment noted. The spelling will be corrected.*
3. It is noted that the POB of the legal description has not been indicated on the survey.
   - *Comment noted. The POB will be added.*
4. It is noted that the proposed addition will be located on top of an existing 18" sanitary sewer line. Will the City allow this?
   - *The sanitary sewer line has been rerouted around the proposed building. Please see Sheet C6.0.*
5. Sheet C2.0; Site Grading and Erosion Control Notes; It is noted that within note #2 the reference to the FEMA Panel number is not correct.
   - *FEMA Panel Number has been revised. Please see Sheet C2.0.*
6. Sheet C2.0; Site Grading and Erosion Control Notes; It is noted that within note #33 there is a spelling error, "ben" should be been.
   - *Spelling error has been revised. Please see Sheet C2.0.*
7. Sheet C2.0; General Control Notes; It is noted that note #2 indicates that the site layout is based on the points noted. Have these points been field staked?
   - *The reference points have not been field staked for construction purposes. The surveyor has established control in the area, and will use this data to stake out the proposed improvements once construction crews mobilize.*
8. Sheet C2.0; Building Coverage Table; Tables indicate the proposed building is 12,378 sq. ft. It is noted Sheet C5.0 indicates the proposed addition will be 11,570 sq. ft.
   - *Square footage has been revised to provide consistency. The proposed addition is 13,412 sq. ft. Please see Sheet C5.0.*
9. Sheet C4.0; Demolition Plan; Will the buried electric line located below the proposed building be removed or left in place?
   - *This is a site electrical line for lighting, etc. This line will be removed & re-routed.*
10. Sheet C5.0; It is noted that the coordinate values indicated appear to be based on assumed datum. The source of datum should be clearly noted on the plans as well as the point of origin.
    - *Datum information is provided on the Existing Conditions sheet. Please see Sheet C1.0.*
11. Sheet C6.0; It is noted storm sewer pipe lengths and sizes have not been indicated for a number of pipe runs.
    - *Proposed storm sewer pipe table has been revised. Please see Sheet C6.0.*

12. Sheet C6.0; Proposed Storm Sewer Structure Table; A3 is noted as an existing structure. I am unable to locate this structure on the survey provided.
    - *Proposed storm sewer structure A3 has been revised to a catch basin. Please see Sheet C6.0.*

Department of Engineering

1. Revise the parking access aisle width from 24' to 26' as stipulated in the City of Fort Pierce Code of Ordinances Section 22-60(c)(5).
    - *Drive aisle width has been widened from 24' to 26'. Please see Sheet C5.0.*
2. The drainage plan was reviewed conceptually and will be thoroughly appraised at the time of the Site Work Permit application. The applicant's engineer shall be cognizant that all proposed drainage pipes are to have a 15" minimum diameter and be either aluminum or reinforced concrete in accordance with the City of Fort Pierce Code of Ordinances Section 17-28(b).
    - *Proposed drainage pipes are reinforced concrete material and meet minimum diameter requirements. Please see Sheet C6.0.*
3. Add a note to the site engineering plan stating that all construction shall comply with the City of Fort Pierce Code of Ordinances Sections 17 and 22.
    - *Note has been added to the site plan. Please see Sheet C5.0.*

Building Official

1. Main Addition Building Permit.
    - *Comment noted. Permit will be obtained.*
2. Generator Enclosure Building Permit.
    - *Comment noted. Permit will be obtained.*
3. New Generator?
    - *A new generator is proposed for this project.*
4. Oxygen Park? Separate Permit (UG piping to building?).
    - *Underground piping will be provided to the building & a permit will be obtained.*
5. Sitework Permit.
    - *Comment noted. Permit will be obtained.*
6. Additional Parking.
    - *Parking meets code minimum. Please see the associated calculations on Sheet C2.0.*
7. Flag Pole/Foundation Permit.
    - *Comment noted. Permit will be obtained.*
8. Enlarge Electrical Rooms? In Existing Buildings?
    - *This will be addressed within the building permit submittal.*
9. New Site Lighting? Part of this or another project?
    - *New site lighting will be provided for this project.*

Should you have any questions or concerns, please do not hesitate to contact me via phone (407-975-1273) or email (ghuddleston@leainc.com).

Sincerely,
LITTLEJOHN ENGINEERING ASSOCIATES, INC.

George Huddleston, PE
Project Manager

Planning Board **7. b.**

Meeting Date: 06/09/2015

Information

REQUESTED ACTION

Planned Development (PD), Zoning Atlas Amendment & Preliminary Plat - Inlet Palms - 1502 Seaway Drive

LOCATION

1502 Seaway Drive

RESPONSIBLE STAFF

Clarissa Davis, Planner

RECOMMENDATION

Approval with the condition that a revised landscape plan is submitted prior to the regularly scheduled City Commission meeting.

Attachments

Staff Report
Development Review Application
Zoning Atlas Amendment Application
Preliminary Plat Application
Capacity Analysis
Traffic Report
Property Record Cards
Warranty Deed
Project Narrative
Civil Plan, Site Plan, etc.
Environmental Statement, Historical Statement, Site Photos
Drainage Analysis
TRC Comments & Response

Form Review

Form Started By: Clarissa Davis Started On: 06/02/2015 01:59 PM

Final Approval Date: 06/02/2015

CITY OF FORT PIERCE
PLANNING DEPARTMENT

REBECCA GROHALL, AICP, PLANNING MANAGER
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

TO: Members of the City of Fort Pierce Planning Board

THROUGH: Rebecca Grohall, AICP, Planning Manager

FROM: Clarissa Davis, Planner

SUBJECT: 1502 Seaway Drive: Zoning Atlas Amendment & Preliminary Plat

DATE: May 29th, 2015

STAFF REPORT

Owner: Belmont Avenue Property, LLC
2277 N Circle Drive, Palatine. IL 60067

Applicant/Representative: Jodah Bittle
Schulke, Bittle & Stoddard, LLC
1717 Indian River Blvd., Suite 201, Vero Beach, FL 32960

Requested Action: Approval of a Zoning Atlas Amendment (Rezoning) from R-4A, Hutchinson Island Medium Density, to PD, Planned Development; Approval of the Preliminary Plat application, Planned Development Plan & Design Review

Location: 1502 Seaway Drive

Parcel IDs: 2401-501-0279-000-1; 2401-501-0279-010-4

Current Zoning: R-4A, Hutchinson Island Medium Density

Proposed Zoning: PD, Planned Development

Current Future Land Use: HIR, Hutchinson Island Residential

Surrounding Zoning:

North	East	South	West
n/a	R-4A	R-3	C-5

Parcel(s) Size: .828 acres

Staff Analysis:

The applicant is requesting the approval of a Zoning Atlas Amendment (Rezoning) from R-4A, Hutchinson Island Medium Density Residential to PD, Planned Development.

The site of this project is located at 1502 Seaway Drive on approximately .82 acres of land. This corridor is made up of single-family homes as well as condominiums built as late as the 1950's to the year 2010. The proposal is for seven (7) townhome units as well as private dock slips for its residents. Each unit will have its own private pool and walkway to the dock area. The property currently has an HIR, Hutchinson Island Residential Future Land Use designation which allows for such a use to be pursued.

The PD, Planned Development zoning district allows for applicants to determine their own reasonable parameters in terms of height, setbacks, lot coverage etc. and promote flexibility in design. Within the Fort Pierce City Code, as it relates to townhomes, there were a number of regulations that could not be met such as minimum lot width, depth, minimum distance between residential buildings etc. The applicant has noted the deficiencies of their proposal in their Statement of Need (attached).

The applicant has provided a narrative displaying site data and development parameters. The height of the townhome units vary, with the maximum height at 47'-4" from Fema Base Flood to peak of roof. Setbacks from the structures to the east and front property line are indicated at ten (10) feet, while the setback from the west and north property line is designated at fifteen (15) feet. Seven (7) feet separates units 1-3 from units 4-6. A total of 71.3% of the site is covered in impervious area including the pool areas. Green space is calculated at 28.7%.

The applicant is also requesting approval of the Preliminary Plat application. The plat displays how lots shall be divided and their individual sizes. The plat also identifies Tract 'A' as the access area and Tract 'B' as the common area amongst the residents. The access and utility easements are shown and measured. Staff has reviewed the Preliminary Plat according to code Section 18-10 Plat Specifications and has determined these code requirements are met.

TRC Comments:

TRC comments as well as the applicant's response are attached to this staff report. The applicant has replied to the comments and the updated plans have been transmitted to the departments for further review.

Staff Comments:

Before an amendment may be approved, the following standards must be satisfied per Section 22-131 of the City Code:

(1) The amendment is consistent with the comprehensive plan;
(2) The amendment will not have an adverse affect on the ability of the city to:
    a. Satisfy land and water use needs; and

b. Meet transportation demands and provide community facilities and services; and

(3) The amendment will promote and protect the public health, safety and general welfare.

As the proposed amendments meet the above standards, Staff recommends that the Planning Board forward a recommendation of **approval** to the City Commission to approve the Zoning Atlas Amendment, Planned Development Plan as well as the Preliminary Plat with the condition that the applicant provides an updated landscape plan prior to the scheduled City Commission meeting.

CITY OF FORT PIERCE

PLANNING DEPARTMENT

Rebecca Grohall, AICP, Planning Manager
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

DEVELOPMENT REVIEW

Property address or Location 1502 Seaway Drive, Ft. Pierce

Parcel ID #(s) 2401-501-0279-000-1 and 2401-501-0279-010-4

Project description Inlet Palms - Seven (7) multi-family units

Belmont Ave Property, LLC
Property Owner(s)
2277 N Circle Ave
Street Address
Palatine, IL 60067
City State Zip
847-337-1756
Phone Number
mabinanti@comcast.net
Email Address

Foglia Contracting Corp. c/o Schulke, Bittle & Stoddard, LLC
Applicant/Representative, Title, Company
1717 Indian River Blvd, Suite 201
Street Address
Vero Beach, FL 32960
City State Zip
772-770-9622
Phone Number
jbittle@sbsengineers.com
Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

Thomas Michael Abinanti
Property Owner(s) Signature(s)

STATE OF ~~FLORIDA~~ Illinois COUNTY COOK
The foregoing instrument was acknowledged before me this 24th day of April, 2015, by Thomas M. Abinanti who is personally known to me or has produced Drivers License as identification.

Signature of Notary

OFFICIAL SEAL
DILEK IDRIZ
Notary Public - State of Illinois
My Commission Expires Jan 11, 2017
(seal)

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____
Intake Planner_____
Planner Assigned_____
Approved By_____ Date _____
Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

❑ DEVELOPMENT REVIEW

General Information

- ❑ Incomplete application packets cannot be accepted.
- ❑ Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

Choose Application Type:

Application Type		
☑ Site Plan	❑ Conditional Use with New Const.	❑ Major Amendment
❑ Conceptual Development Plan		❑ Minor Amendment

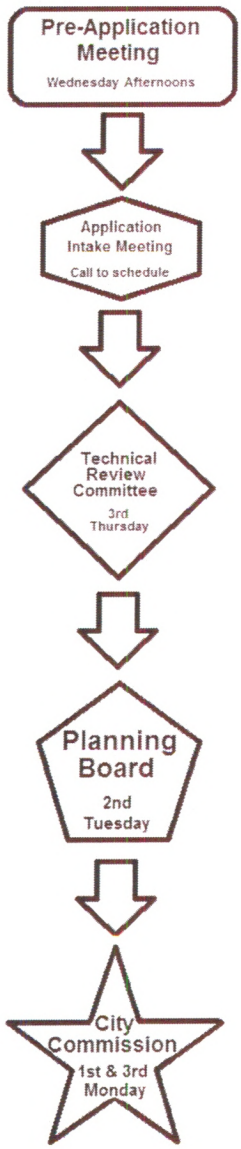
Site Information:

Non-Residential: Proposed Sq. Ft.: _____ Residential: Proposed Units: 7

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

North	South	East	West
	Residential	Residential	College

Application Outlook



Site Plan submittal requirements:

Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- ☑ Complete notarized application
- ☑ Warranty Deed
- ☑ SLC Property Record Card
- ☑ Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- ☑ General location map (see Section 22-58.d.2)
- ☑ Survey (see Section 22-58.d.3)
- ☑ Site Plan (see Section 22-58.d.4)
- ☑ Landscaping Plan (see Section 22-187)
- ☑ Storm Drainage Plan (see Section 22-58.d.6)
- ☑ Environmental Impact Report
- ❑ Beach/Dune System protection plan, if applicable (see Section 22-58.d.7) N/A
- ❑ Lighting Plan (see Section 22-58.d.8) N/A
- ☑ Design Review submittals (see Design Review application)
- ☑ Traffic Impact Report
- ☑ Concurrency Review submittals (see Concurrency Review application)

Application for Zoning Atlas Map Amendment

Application submission shall include the following:

●**TRC** (*Initial Submission): One (1) original and (8) paper copies of the application and support documents and provide one (1) electronic copy of the application packet as described below.

●**Planning Board**: One (1) original and (16) paper copies of the application and support documents and provide one (1) electronic copy of the application packet as described below.

●**City Commission**: One (1) original and (11) paper copies of the application and support documents and provide one (1) electronic copy of the application packet as described below.

In addition to a complete application, packets shall include:

- ☑ Warranty Deed & Legal Description
- ☑ St. Lucie County Property Record Card
- ☑ Statement of why there is a need for the proposed future land use map amendment and how the amendment will result in an orderly and logical development pattern; statements how amendment(s) are consistent with Comprehensive Plan; how future land use designation is compatible with future land use designations and existing land uses surrounding the amended lands; identify future land use designations and existing land uses within a ½ mile of the subject property that have the same or greater type of proposed future land use designation; data and analysis to support conclusions.
- ☑ Current Survey
- ☑ Environmental Study
- ☑ Traffic Impact Report
- ☑ *** Capacity Analysis-Separate Form
- ☑ Drainage Analysis
- ☑ Historical Report
- ☑ 1 CD of all documents submitted in PDF
- ☐ Other_____

1. Property Address/Location: 1502 Seaway Drive, Ft. Pierce

2. Property Tax ID(s): 2401-501-0279-000-1 and 2401-501-0279-010-4

3. Total Acreage: 0.828

4. Existing Future Land Use Designation: HIR

5. Existing Zoning Classification: R-4A

6. Proposed Zoning Classification: PD (Planned Development)

7. Other applications being submitted concurrent with this application, if any:

Subdivision Preliminary Plat, Design Review, Development Review, Capacity Analysis

8. Describe the existing uses, improvements and structures on the amendment lands: Vacant (previously a hotel)

9. Are there any identified or possible historical structures on the amendment lands? No, vacant

10. The reason for making this request: To develop seven (7) multifamily units

11. CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	N/A		
South	Residential	RL	R-3
East	Residential	GC	C-5
West	College	GC	C-5

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	HIR	R-4A	8.00	0.828	AE-6 & 7 VE-8
Proposed	HIR	PD	8.45	0.828	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6 = persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum 1,820 GPD
Current Zoning	Total gallons per day 1,820
Proposed Zoning	Total gallons per day 1,820

Change in Demand	**Total gallons per day** 1,820

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum 1,820
Current Zoning	Total gallons per day 1,820
Proposed Zoning	Total gallons per day 1,820
Change in Demand	**Total gallons per day** 1,820

C. Parks and Recreation (Residential Classifications Only):
(Du x 2.6 = persons + 44,227 = population /LOS)

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people	2.21	2.21	0.00
Urban District	5 acres per 1,000 people	2.21	2.21	0.00
Community	2.5 acres per 1,000 people	2.21	2.21	0.00
Neighborhood	1.36 acres per 1,000 people	2.21	2.21	0.00

D. Public Schools (Residential Classifications Only):
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

	K-8	High
School Name	Lawnwood Elem./ Dan McCarty Middle/Lincoln Park Academy	
City	Ft. Pierce	Ft. Pierce
Distance	N/A	N/A
Current Zoning Enrollment Demand	1.01	0.43
Proposed Zoning Enrollment Demand	1.01	0.43
Change in Demand	0.00	0.00

E. Solid Waste:	
2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units	
Demand Analysis	Maximum 2
Current Zoning	2
Proposed Zoning	2
Change in Demand	0

F. Stormwater: Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)	
Impact	No net increase proposed

III. Transportation Analysis

G. Traffic Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning		
Proposed Zoning		
Change in Demand	Trips	Trips
Impact to Capacity		

12. Name of Owner(s): Belmont Ave Property, LLC
Mailing Address: 2277 N Circle Drive
City Palatine State IL Zip 60067
Phone # 847-337-1756
E-mail: mabinanti@comcast.net

13. Name of Applicant: Foglia Contracting Corp.
Mailing Address: 1555 Indian River Blvd, B141
City Vero Beach State FL Zip 32960
Phone # 954-444-6125 Fax #
E-mail: jf33067@aol.com

14. Name of Representative: Jodah B. Bittle, P.E., Schulke, Bittle & Stoddard, LLC
Mailing Address: 1717 Indian River Blvd, Suite 201
City Vero Beach State FL Zip 32960
Phone # 772-770-9622 Fax #
E-mail: jbittle@sbsengineers.com

15. Applicant Acknowledgements (Owner's signature must be notarized)

I certify that: (Check One)

_____ I (we) do hereby certify that I (we) own in fee simple the above referenced described property for which a change in Zoning Classification is requested.

_____ I (we) are not the owner of the above described property; however, the owners signature below authorizes the applicants the authority to act as agent for the owner(s) of record.

Applicant's Signature 5/1/15 Date

1555 Indian River Blvd, Suite B141, Vero Beach, FL 32960

Address State Zip

954-444-6125 jf33067@aol.com

Phone Fax E-mail Address

16. Property Owners Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application for a change in zoning classification. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Agent to act in his/her behalf for the purposes of seeking this change to the City' Land Development Regulations for the property described herein.

Belmont Ave Property, LLC 847-337-1756

Property Owner's Name (Please Print) Phone

2277 N Circle Drive, Palatine, IL 60067

Address State Zip

Thomas Michael Abinanti 4/29/15

Property Owner's Signature Date

STATE OF ~~FLORIDA~~ Illinois)

~~ST LUCIE~~ COUNTY) Cook

The foregoing instrument was acknowledged before me this 29th day of April, 2015, by Thomas M Abinanti, who is personally known to me or has produced as identification.

Signature of Notary

[seal] OFFICIAL SEAL DILEK IDRIZ Notary Public - State of Illinois My Commission Expires Jan 11, 2017

OFFICE USE:

DATE RECEIVED:_____ Signed:_____

File Number:_____ Check No: _____ Receipt No: _____

TRC Review:_____ Planning Board Review: _____ City Commission: _____

Ordinance No:_____ Date Approved: _____

CITY OF FORT PIERCE

PLANNING DEPARTMENT

COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

Subdivision

Property address or Location 1502 Seaway Drive, Ft. Pierce

Parcel ID #(s) 2401-501-0279-000-1 and 2401-501-0279-010-4

Project description Inlet Palms - Seven (7) multi-family units

Belmont Ave Property, LLC	Foglia Contracting Corp. c/o Jodah B. Bittle, P.E., Schulke, Bittle & Stoddard, LLC
Property Owner(s)	**Applicant/Representative, Title, Company**
2277 N Circle Drive	1717 Indian River Blvd, Suite 201
Street Address	Street Address
Palatine, IL 60067	Vero Beach, FL 32960
City State Zip	City State Zip
847-337-1756	772-770-9622
Phone Number	Phone Number
mabinanti@comcast.net	jbittle@sbsengineers.com
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

Thomas Michael Abinanti

Property Owner(s) Signature(s)

STATE OF ~~FLORIDA~~ Illinois COUNTY Cook

The foregoing instrument was acknowledged before me this 29th day of April, 2015, by Thomas M. Abinanti who is personally known to me or has produced Drivers License as identification.

Signature of Notary

(seal)

OFFICIAL SEAL
DILEK IDRIZ
Notary Public - State of Illinois
My Commission Expires Jan 11, 2017

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____

Intake Planner_____

Planner Assigned_____

Approved By_____ Date _____

Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

☑ SUBDIVISION: PRELIMINARY PLAT

Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:

- ☑ Preliminary Plat prepared by a surveyor registered in the State of Florida meeting the requirements of Sections 18-5, & 18-10 (a) (1-3) & (c)
- ☑ A copy of the deed
- ☑ Concurrency application, complete
- ☑ Complete, notarized application

☐ SUBDIVISION: INFRASTRUCTURE PLAN REVIEW

Please submit one (1) original and four (4) hard copies and one (1) CD of the following, stamped by a state of Florida registered engineer meeting the requirements of 18-10 (a) (4) :

- ☐ Street construction plans
- ☐ Water & Sewer system construction plans
- ☐ Stormwater Retention plans
- ☐ Electric Infrastructure plans
- ☐ Gas Infrastructure plans
- ☐ Complete, notarized application

☐ SUBDIVISION: FINAL PLAT

Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:

- ☐ A copy of the deed
- ☐ Final Plat stamped by a state of Florida registered surveyor meeting the requirements of 18-5, & 18-10 (b & c):
- ☐ Complete, notarized application

☐ SUBDIVISION: MINOR REPLAT

Please submit one (1) original and thirteen (13) hard copies and one (1) CD of the following:

- ☐ A copy of the deed
- ☐ As-built survey of original parcel stamped by a registered surveyor in the State of Florida
- ☐ Scaled drawing, stamped by a registered surveyor in the State of Florida, of surveyed parcel indicating
  - proposed lots, including acreage, square footage, & dimensions.
  - any & all easements, rights-of-way, or similar instruments found on or adjacent to the subject property
- ☐ Complete, notarized application

CITY OF FORT PIERCE
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING DIVISION

COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	N/A		
South	Residential	RL	R-3
East	Residential	GC	C-5
West	College	GC	C-5

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	HIR	R-4A	8.00	0.828	AE-6 & 7 VE-8
****Proposed**	HIR	PD	8.45	0.828	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum 1,820
Current Zoning/FLU	Total gallons per day 1,820
**Proposed Zoning/FLU	Total gallons per day 1,820
**Change in Demand	Total gallons per day 1,820

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum 1,820
Current Zoning/FLU	Total gallons per day 1,820
**Proposed Zoning/FLU	Total gallons per day 1,820
**Change in Demand	Total gallons per day 1,820

C. Parks and Recreation (Residential Classifications Only):
(Du x 2.6 = persons + 44,227 = population /LOS)

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people	2.21	2.21	0.00
Urban District	5 acres per 1,000 people	2.21	2.21	0.00
Community	2.5 acres per 1,000 people	2.21	2.21	0.00
Neighborhood	1.36 acres per 1,000 people	2.21	2.21	0.00

D. Public Schools (Residential Classifications Only):
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

	K-8	High
School Name	Lawnwood Elem./ Dan McCarty Middle/Lincoln Park Academy	
City	Ft. Pierce	Ft. Pierce
Distance	N/A	N/A
Current Zoning/FLU Enrollment Demand	1.01	0.43
****Proposed Zoning/FLU Enrollment Demand**	1.01	0.43
****Change in Demand**	0.00	0.00

E. Solid Waste:
2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units

Demand Analysis	Maximum 2
Current Zoning/FLU	2
****Proposed Zoning/FLU**	2
***Change in Demand**	0

F. Stormwater:
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

Impact	No volume discharge increase proposed

III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

See Traffic Study

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity	Land Use Code 210 and Land Use Code 230	
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum 66	Maximum
Current Zoning/FLU	66	6 / 7
****Proposed Zoning/FLU**	66	6 / 7
***Change in Demand**	0 related to zoning 66 for site plan Trips	6 / 7 Trips
Impact to Capacity	de minimis	

IV. Project Description

PHASING
Is this project (phase) part of a larger project? [ ] Yes [X] No
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.
Total Project: Residential Units: Single Family: Multifamily:
Non-residential (square footage):
Mixed-use (describe use):
(If this is a single phase project, name it Phase I – Total)

RESIDENTIAL DATA					
Type	**Phase**	**Number of Units**	**Acres**	**Expected beginning date**	**Expected completion date**
Single-family, detached					
Single-family, attached					
Multi-family	1	7	0.828	7/15	1/16
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. [ ] Yes [X] No

B. 1. Does this application involve demolition or re-use of any structure(s)? [ ] Yes [X] No
If yes, what is the size of the structure(s) to be demolished or re-used? _____

2. What is the current use of the structure to be demolished or re-used? N/A

3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? [X] Yes [ ] No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)
Planning Department has this calculation

C. Exemptions Requested:

** Complete section if requesting a change in zoning, future land use, or expanding

Institute of Transportation Engineers

Trip Generation Data Form (Part 1)

Land Use/Building Type:[1]	ITE Land Use Code:
Source:	Source No. (ITE use only)
Name of Development:	Day of the Week:
City: State/Province: Zip/Postal Code:	Day: Month: Year:
Country:	Metropolitan Area:

1. For fast-food land use, please specify if hamburger- or nonhamburger-based.

Location Within Area:

☐ (1) CBD ☐ (3) Suburban (Non-CBD) ☐ (5) Rural
☐ (2) Urban (Non-CBD) ☐ (4) Suburban CBD ☐ (6) Freeway Interchange Area (Rural)
☐ (7) Not Given

Detailed Description of Development:[3]

Independent Variable: (include data for as many as possible)[2]	Actual	Estimated
_____ (1) Employees (#)	☐	☐
_____ (2) Persons (#)	☐	☐
_____ (3) Total Units (#) (indicate unit:_____)	☐	☐
_____ (4) Occupied Units (#) (indicate unit:_____)	☐	☐
_____ (5) Gross Floor Area (gross sq. ft.) (% of development occupied _____)	☐	☐
_____ (6) Net Rentable Area (sq. ft.)	☐	☐
_____ (7) Gross Leasable Area (sq. ft.) (% of development occupied _____)	☐	☐
_____ (8) Total Acres (% developed: _____)	☐	☐
_____ (9) Parking Spaces (% occupied: _____)	☐	☐
_____ (10) Beds (% occupied: _____)	☐	☐
_____ (11) Seats (#)	☐	☐
_____ (12) Servicing Positions/Vehicle Fueling Positions	☐	☐
_____ (13) Shopping Center % Out-parcels/pads	☐	☐
_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (16) Other _____	☐	☐
_____ (17) Other _____	☐	☐

2. Definitions for several independent variables can be found in the *Trip Generation*, Second Edition, *User's Guide* Glossary.

3. Please provide all pertinent information to describe the subject project, including the presence of bicycle/pedestrian facilities. To report bicycle/pedestrian volumes, please refer to Part 4 of this data form.

Other Data:

Vehicle Occupancy (#):
_____ A.M. _____ P.M. _____ 24-hour %

Percent by Transit:
_____ A.M. % _____ P.M. % _____ 24-hour %

Percent by Carpool/Vanpool:
_____ A.M. % _____ P.M. % _____ 24-hour %

Employees by Shift:

	Start Time	End Time	Employees (#)
First Shift:	_____	_____	_____
Second Shift:	_____	_____	_____
Third Shift:	_____	_____	_____

Parking Cost on Site: Hourly _____ Daily _____

Transportation Demand Management (TDM) Information:

At the time of this study, was there a TDM program (that may have impacted the trip generation characteristics of this site) underway?

☐ No

☐ Yes (If yes, please check appropriate box/boxes, describe the nature of the TDM program(s) and provide a source for any studies that may help quantify this impact. Attach additional sheets if necessary)

☐ (1) Transit Service
☐ (2) Carpool Programs
☐ (3) Vanpool Programs
☐ (4) Bicycle/Pedestrian Facilities and Site Improvements
☐ (5) Employer Support Measures
☐ (6) Preferential HOV Treatments
☐ (7) Transit and Ridesharing Incentives
☐ (8) Parking Supply and Pricing Management
☐ (9) Tolls and Congestion Pricing
☐ (10) Variable Work Hours/Compressed Work Weeks
☐ (11) Telecommuting
☐ (12) Other _____

Please Complete Form on Other Side

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Trip Generation Data Form (Part 2)

Summary of Driveway Volumes ***(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)***

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume																		
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time *(ex.: 7:15 - 8:15)*:																		
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator[2] Time:																		
P.M. Peak Hour Generator[2] Time:																		
Peak Hour Generator[3] Time (Weekend):																		

[1] Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.
[2] Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.
[3] Highest hourly volume during the entire day. Please specify the peak hour.
Please refer to the *Trip Generation User's Guide* for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00							11:00-12:00							3:00-4:00						
6:15-7:15							11:15-12:15							3:15-4:15						
6:30-7:30							11:30-12:30							3:30-4:30						
6:45-7:45							11:45-12:45							3:45-4:45						
7:00-8:00							12:00-1:00							4:00-5:00						
7:15-8:15							12:15-1:15							4:15-5:15						
7:30-8:30							12:30-1:30							4:30-5:30						
7:45-8:45							12:45-1:45							4:45-5:45						
8:00-9:00							1:00-2:00							5:00-6:00						

☐**Check if Part 3, 4 and/or additional information is attached.**

Survey conducted by: Name: _____

Organization: _____

Address: _____

City/State/Zip: _____

Telephone #: _____ Fax #: _____ E-mail: _____

Please return to: Institute of Transportation Engineers
Technical Projects Division
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438 USA
Telephone: +1 202-289-0222
Fax: +1 202-289-7722
ITE on the Web: www.ite.org

Institute of Transportation Engineers

Trip Generation Data Form (Part 3)

Name/Organization: _____ **City/State:** _____

Telephone Number: _____

Detailed Driveway Volumes: Attach this sheet to Parts 1 and 2 if you are providing additional information.

Day of the week: _____ *(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)*

A.M. Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
12:00-12:15							12:00-12:15						
12:15-12:30							12:15-12:30						
12:30-12:45							12:30-12:45						
12:45-1:00							12:45-1:00						
1:00-1:15							1:00-1:15						
1:15-1:30							1:15-1:30						
1:30-1:45							1:30-1:45						
1:45-2:00							1:45-2:00						
2:00-2:15							2:00-2:15						
2:15-2:30							2:15-2:30						
2:30-2:45							2:30-2:45						
2:45-3:00							2:45-3:00						
3:00-3:15							3:00-3:15						
3:15-3:30							3:15-3:30						
3:30-3:45							3:30-3:45						
3:45-4:00							3:45-4:00						
4:00-4:15							4:00-4:15						
4:15-4:30							4:15-4:30						
4:30-4:45							4:30-4:45						
4:45-5:00							4:45-5:00						
5:00-5:15							5:00-5:15						
5:15-5:30							5:15-5:30						
5:30-5:45							5:30-5:45						
5:45-6:00							5:45-6:00						
6:00-6:15							6:00-6:15						
6:15-6:30							6:15-6:30						
6:30-6:45							6:30-6:45						
6:45-7:00							6:45-7:00						
7:00-7:15							7:00-7:15						
7:15-7:30							7:15-7:30						
7:30-7:45							7:30-7:45						
7:45-8:00							7:45-8:00						
8:00-8:15							8:00-8:15						
8:15-8:30							8:15-8:30						
8:30-8:45							8:30-8:45						
8:45-9:00							8:45-9:00						
9:00-9:15							9:00-9:15						
9:15-9:30							9:15-9:30						
9:30-9:45							9:30-9:45						
9:45-10:00							9:45-10:00						
10:00-10:15							10:00-10:15						
10:15-10:30							10:15-10:30						
10:30-10:45							10:30-10:45						
10:45-11:00							10:45-11:00						
11:00-11:15							11:00-11:15						
11:15-11:30							11:15-11:30						
11:30-11:45							11:30-11:45						
11:45-12:00							11:45-12:00						

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Trip Generation Data Form (Part 4)

Summary of Bicycle Volumes

	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
24-Hour Volume									
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time *(ex.: 7:15 - 8:15)*:									
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:									
A.M. Peak Hour Generator[2] Time:									
P.M. Peak Hour Generator[2] Time:									
Peak Hour Generator[3] Time (Weekend):									

[1] Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.) as defined in Trip Generation Data Form (Part 2). Please specify the peak hour.
[2] Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.
[3] Highest hourly volume during the entire day. Please specify the peak hour. Please attach supplemental hourly volumes.
Please refer to the *Trip Generation User's Guide* for full definition of terms.

Summary of Pedestrian Volumes

	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
24-Hour Volume									
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time *(ex.: 7:15 - 8:15)*:									
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:									
A.M. Peak Hour Generator[2] Time:									
P.M. Peak Hour Generator[2] Time:									
Peak Hour Generator[3] Time (Weekend):									

Survey conducted by: Name: _____

Organization: _____

Address: _____

City/State/Zip: _____

Telephone #: _____ Fax #: _____ E-mail: _____

Please return to: Institute of Transportation Engineers
Technical Projects Division
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438 USA
Telephone: +1 202-289-0222
Fax: +1 202-289-7722
ITE on the Web: www.ite.org

SUSAN E. O'ROURKE, P.E., Inc.

Traffic Engineering, Transportation Planning

April 29, 2015

Mr. Joseph Foglia
Foglia Contracting Corp.
DBA Foglia Custom Homes
1555 Indian River Boulevard, Unit B141
Vero Beach, LF 32960

Re: Inlet Palms

Dear Mr. Foglia:

Susan E. O'Rourke, P.E., Inc. has completed the analysis of the proposed plan to develop 7 residential units along Seaway Drive in Fort Pierce. The purpose of this letter report is to demonstrate that the project has a de minimis impact on the roadway network. De minimis is defined as project traffic being less than 1 percent of level of service D capacity and the total traffic of the adjacent roadway being less than 110% of capacity at project buildout.
The steps in the analysis and the ensuing results are presented herein.

Project Description

The project will consist of 7 townhomes; 6 are attached and one detached. The project is located on Seaway Drive to the east of the Coast Guard Museum in Fort Pierce. **Attachment A** shows the project site plan.

Project Traffic

To estimate traffic generated by the 7 units, the ITE Trip Generation, 9th Edition trip rates for Townhome Condo dwelling units, LU Code 230 were applied to the 6 attached units and LU Code 210 applied to the detached unit. Trip generation for the project including daily, AM and PM peak hour is shown in **Attachment B**. As shown there will be 66 daily trips, 6 AM peak hour trips and 7 PM peak hour trips.

Adjacent Street Traffic

Seaway Drive is a two- lane roadway adjacent to the project. It has a two-way capacity of 1200 vehicles per hour. (Non-State Class II)

The project traffic has an assignment of 75% to the west and 25% to the east. That gives its greatest impact as 75% of 6 trips = 5 in the AM and 75% of 10 trips in the PM = 5. Therefore, in the AM and PM peak hour the project has an impact of .42% of capacity.

969 SE Federal Highway
Suite 402
Stuart, FL 34994

772.781.7918

SEORourke@comcast.net

The total traffic on Seaway Drive was calculated as existing plus growth at 1% for 2 years plus project traffic. The total AM traffic in 2016= 1,009 existing + 20 growth + 5 project = 1,034 AM trips. The total PM traffic in 2016= 1,055 existing + 21 growth + 5 project = 1,081 PM total)

The total traffic is LOS D capacity for both AM and PM peak hours.

Conclusion

Since the project traffic is less than 1% of LOS D capacity and the total traffic on Seaway Drive is less than 110% of capacity (in fact less than capacity), the project meets the criteria of De Minimis.

Additional analysis is not required and the project satisfies concurrency.

It has been a pleasure working with you. If you have any questions or comments, please give me a call.

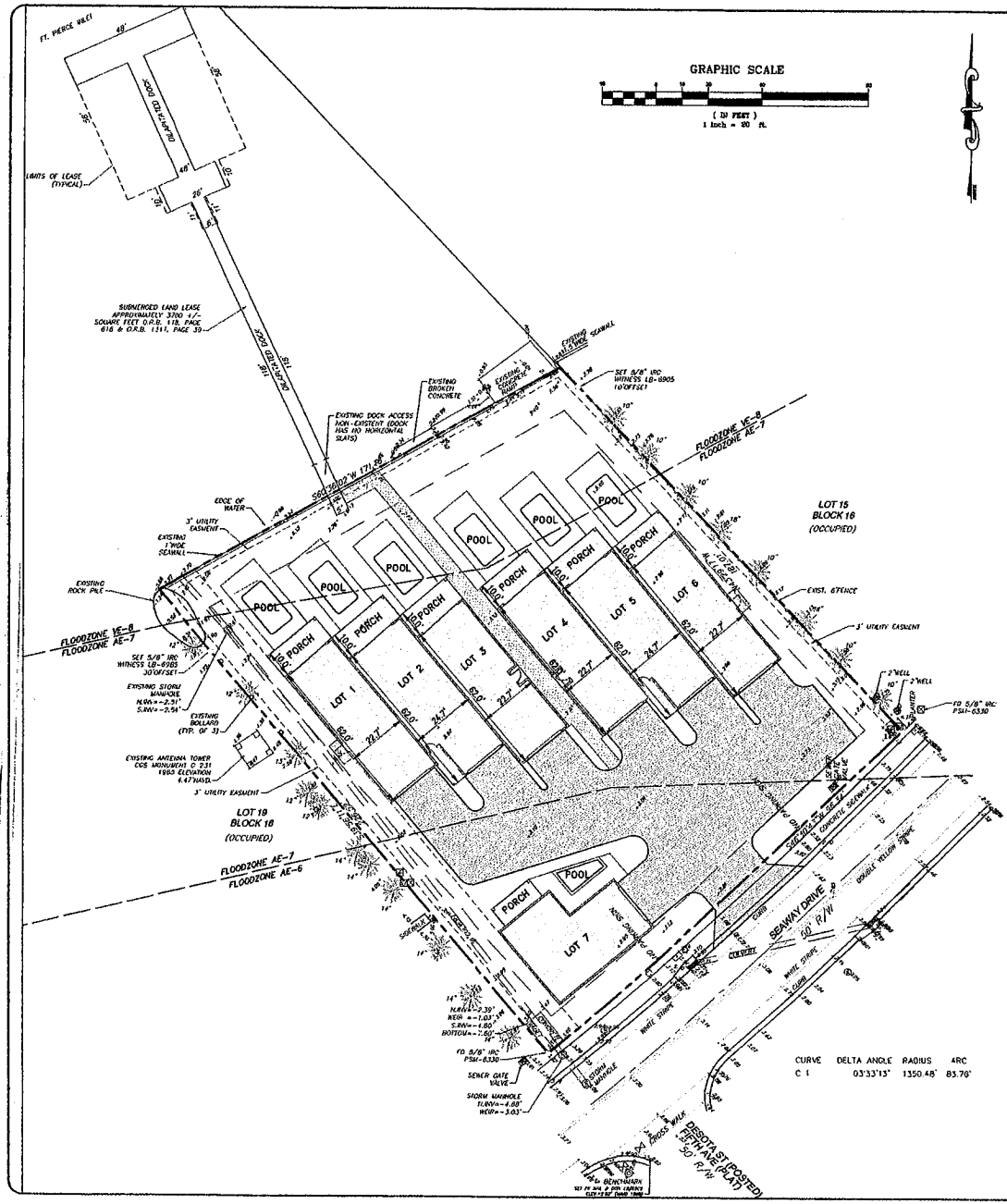
Respectfully submitted,
SUSAN E. O'ROURKE, P.E., INC.

Susan E. O'Rourke, P.E.
Registered Civil Engineer – Traffic

Susan E. O'Rourke, P.E., Inc
#42684

Prepared by: Susan E. O'Rourke, P.E., Inc. Certificate of Authorization: #26869 969 SE Federal Highway, Suite 402 Stuart, Florida 34994 772-781-7918	Professional Engineer Susan E. O'Rourke, P.E. Date signed and sealed: 4/29/15 License #: 42684

ATTACHMENT A



LEGEND

- EXISTING SANITARY SEWERLINE
- PROPOSED SANITARY SEWERLINE
- EXISTING DRAINAGE PIPE
- PROPOSED DRAINAGE PIPE
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- FILTER FENCE/SEDIMENT BARRIER
- 24.45 PROPOSED SPOT ELEVATION AT EOP/SIDEWALK
- 9.0'R PROPOSED EOP RADIUS
- 25.0 PROPOSED GRADE / CONTOUR
- PROPOSED DRAINAGE FLOW DIRECTION
- STREET LIGHT
- PROPOSED LIGHT ON-SITE
- TYPE 'S' INLET
- TYPE 'C' OR TYPE 'F' INLET
- JUNCTION MANHOLE
- DS-1 DRAINAGE STRUCTURE LABEL
- PROPOSED FIRE HYDRANT
- PROPOSED SIGN
- SEWER MANHOLE

PROPOSED DENSITY 7 UNITS / 0.83 ACRES = 8.43 UNITS / ACRE

TOTAL DEVELOPABLE AREA	33,063 SF = 0.83 AC	100.0%
IMPERVIOUS AREA:	27,078 SF = 0.51 AC	81.9%
PAVER/PAVING AREA:	8,231 SF = 0.19 AC	22.8%
SIDEWALK AREA:	1,191 SF = 0.03 AC	3.1%
POOL AREA:	1,513 SF = 0.04 AC	4.6%
BUILDING AREA:	11,185 SF = 0.26 AC	31.0%
PERVIOUS AREA:	13,961 SF = 0.32 AC	38.7%

Legend & Abbreviations: (symbols not scaleable for size)

- PLS - PROFESSIONAL LAND SURVEYOR
- PSM - PROFESSIONAL SURVEYOR & MAPPER
- LS - LAND SURVEYING BUSINESS
- ℄ - CENTERLINE
- R - RADIUS
- L - LENGTH
- Δ - DELTA ANGLE
- EP - EDGE OF PAVEMENT
- BC - BACK OF CURB
- S.M. - STAKE/MARK
- POC - POINT OF COMMENCEMENT
- POB - POINT OF BEGINNING
- ⌖ - (PCP) PERMANENT CONTROL POINT
- PCP - PERMANENT CONTROL POINT
- ⊞ - (PRM) PERMANENT REFERENCE MONUMENT
- PRM - PERMANENT REFERENCE MONUMENT
- ○ - (IP) IRON PIPE
- IP - IRON PIPE
- ● - (IRC) IRON ROD & CAP
- IRC - IRON ROD & CAP
- CM - (CM) CONCRETE MONUMENT
- CM - CONCRETE MONUMENT
- FD - FOUND
- (M) - MEASURED
- (P) - PLAT
- (C) - CALCULATED
- ☒ - TRAFFIC CONTROL BOX
- PINE TREE
- OAK TREE
- PALM TREE
- GUY WIRE
- WOOD UTILITY POLE
- TELEPHONE SERVICE
- CABLE T.V. BOX
- ELECTRIC BOX
- LIGHT POST
- WELL
- HYDRANT
- GATE VALVE
- IRRIGATION VALVE
- WATER METER
- SANITARY MANHOLE
- SANITARY SERVICE
- SEPTIC TANK
- DRAINAGE MANHOLE
- CURB INLET
- SURFACE INLET
- WATERED END SECTION
- CONCEPTUAL DRAINAGE
- STREET SIGN
- PROPOSED GRADE
- NAVD - NORTH AMERICAN VERTICAL DATUM
- 12.34 - TYPICAL ELEVATION
- A/C - AIR CONDITIONER
- CONC. - CONCRETE
- F.F. - FINISH FLOOR
- BSB - BUILDING SETBACK LINE
- EL/ELEV. - ELEVATION
- R/W - RIGHT OF WAY
- AB - AS-BUILT
- P/K - PARKER-KALON

	DATE	REVISION	MARK
DRAWING 15-053			
DESIGNED J.B.S.			
DRAWN J.B.S.			
CHECKED J.B.S.			
DATE 3/25/15			

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SCHULKE, BITTLE & STODDARD, L.L.C.
CIVIL & STRUCTURAL ENGINEERING - LAND PLANNING - ENVIRONMENTAL PERMITTING
CERTIFICATION NO.: 00005908
1717 INDIAN RIVER BLVD., SUITE B-201, VERO BEACH, FLORIDA 32960
TEL.772.770-8622 FAX.772.770-8486 EMAIL info@sbengineers.com

SITE PLAN

INLET PALMS

FLORIDA CERTIFICATION
☐ JOSEPH B. SCHULKE FL REG. NO. 57098
☐ JASON B. BITTLE FL. REG. NO. 57386
☐ MELISSA P. STODDARD FL REG. NO. 57680

DATE:

SHEET 1

PROJECT NO. 15-053

Atachement B

Trip Generation- LU Code 210 Total Single-Family Detached Housing

	Dwelling Units	Equation	% Entering	% Exiting	Trips	Entering	Exiting
Daily	1	T=9.52(X)	50	50	10	5	5
AM Peak Hour	1	T=.78(X)	25	75	1	0	1
PM Peak Hour	1	T=1(X)	63	37	1	1	0

Source: ITE Trip Generation, 9th Edition

***Used rates for only 1 unit**

Trip Generation- LU Code 230 Townhome Condos

	Dwelling Units	Equation	% Entering	% Exiting	Trips	Entering	Exiting
Daily	6	Ln(T)=0.87Ln(X)+2.46	50	50	56	28	28
AM Peak Hour	6	Ln(T)=.80(X)+.26	17	83	5	1	4
PM Peak Hour	6	Ln(T)=0.82Ln(X)+.32	67	33	6	4	2

Total	Trips
Daily	66
AM Peak Hour	6
PM Peak Hour	7

ATTACHMENT C

COUNT DATA

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
Fall 2014

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
SHINN RD	OKEECHOBEE RD to ORANGE AVE	824	1,030	57	B	0.150	66	B	0.174
SNEED RD	OKEECHOBEE RD to ORANGE AVE	1,592	500	116	B	0.725	111	B	0.694
SOUTHBEND BLVD	BECKER RD to FLORESTA DR	12,000	710	726	E	0.955	651	D	0.917
SR A1A NORTH	US 1 to OLD DIXIE HWY	5,607	920	378	C	0.434	379	C	0.436
SR A1A NORTH	OLD DIXIE HWY to N HWY A1A	6,400	0	355	C	0.408	333	C	0.383
SR A1A NORTH	SHOREWINDS DR to INDIAN RIVER C.L.	6,876	920	370	C	0.425	406	C	0.467
SR A1A SOUTH	NETTLES ISLAND to FPL PLANT	7,055	920	432	C	0.497	387	C	0.445
SR A1A SOUTH	FPL PLANT to BLUE HERON BLVD	3,413	660	408	C	0.658	327	C	0.527
SR A1A SOUTH	BLUE HERON BLVD to SEAWAY DR	6,926	560	374	D	0.668	447	D	0.798
SR A1A SOUTH	OCEAN DR to BINNEY DR	11,338	560	564	E	0.940	590	E	0.983
SR A1A SOUTH	BINNEY DR to S CAUSEWAY PARK	11,338	790	564	D	0.714	590	D	0.747
SR A1A SOUTH	S CAUSEWAY PARK to INDIAN RIVER DR	9,799	1,550	539	C	0.781	487	C	0.706
SR A1A SOUTH	INDIAN RIVER DR to US 1	9,799	1,710	539	C	0.700	487	C	0.632
ST JAMES DR	AIROSO BLVD to ST JAMES BLVD	17,000	1,890	1,254	C	0.697	1,216	C	0.676
ST JAMES DR	ST JAMES BLVD to PEACHTREE BLVD	19,000	1,890	1,518	C	0.843	1,208	C	0.671
ST JAMES DR	PEACHTREE BLVD to TELFORD AVE	17,000	1,800	1,254	C	0.729	1,216	C	0.707
ST JAMES DR	TELFORD AVE to MIDWAY RD	21,000	1,890	1,163	C	0.646	1,414	C	0.786
ST JAMES BLVD	SELVITZ RD to ST JAMES DR	4,300	680	318	C	0.964	243	C	0.736
ST LUCIE BLVD	KINGS HWY to KEEN RD	4,821	750	384	C	0.541	364	C	0.513
ST LUCIE BLVD	KEEN RD to 25TH ST	4,821	750	384	C	0.541	364	C	0.513
ST LUCIE BLVD	25TH ST to SENECA AVE	3,784	710	194	C	0.554	197	C	0.563
ST LUCIE BLVD	SENECA AVE to US 1	3,784	790	194	C	0.497	197	C	0.505
ST LUCIE WEST BLVD	COMMERCE CENTER DR to W OF I-95	10,500	590	492	C	0.879	506	C	0.904
ST LUCIE WEST BLVD	I-95 to CALIFORNIA BLVD	35,000	1,890	1,679	C	0.933	1,542	C	0.857
ST LUCIE WEST BLVD	CALIFORNIA BLVD to COUNTRY CLUB DR	35,000	1,890	1,679	C	0.933	1,542	C	0.857
ST LUCIE WEST BLVD	COUNTRY CLUB DR to CASHMERE BLVD	35,000	1,890	1,679	C	0.933	1,542	C	0.857
ST LUCIE WEST BLVD	CASHMERE BLVD to BAYSHORE BLVD	44,000	2,850	2,285	C	0.822	2,125	C	0.764
SUNRISE BLVD	MIDWAY RD to BELL AVE	3,709	510	283	D	0.555	237	C	0.948
SUNRISE BLVD	BELL AVE to EDWARDS RD	4,016	640	254	C	0.794	265	C	0.828

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

$564 \div .559\ D_{factor} = 1,009$ $590 \div .559\ D_{factor} = 1,055$

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2013 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0115 - SR A1A/S - E END OF S BRIDGE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2013	11600 C	E 5800	W 5800	9.00	55.90	9.40
2012	12500 C	E 6300	W 6200	9.00	55.80	6.10
2011	10300 C	E 5100	W 5200	9.00	56.20	6.10
2010	13300 C	E 6700	W 6600	11.16	56.34	6.10
2009	12400 C	E 5700	W 6700	11.51	56.49	8.90
2008	12600 C	E 6300	W 6300	11.31	55.19	8.90
2007	14500 C	E 7200	W 7300	11.33	56.77	11.20
2006	14200 C	E 7100	W 7100	11.16	57.49	3.40
2005	15200 C	E 7600	W 7600	11.60	56.20	2.60
2004	14900 C	E 7500	W 7400	11.10	57.00	2.60
2003	14300 C	E 7100	W 7200	10.70	54.30	2.60
2002	15200 C	E 7400	W 7800	10.80	56.30	2.80
2001	13700 C	E 6800	W 6900	10.80	56.00	2.50
2000	14400 C	E 7400	W 7000	10.40	56.50	2.00
1999	14400 C	E 7300	W 7100	10.80	58.70	2.10
1998	14000 C	E 7000	W 7000	10.40	57.30	3.60

Negetive growth

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2013 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 5016 - SR A1A/S - S OF SEAWAY DR (COUNTY 5016)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2013	6800 C	N 3500	S 3300	9.00	55.90	3.70
2012	6700 F	N 3300	S 3400	9.00	55.80	3.70
2011	6700 C	N 3300	S 3400	9.00	56.20	3.70
2010	7500 F	N 3700	S 3800	11.16	56.34	4.80
2009	7500 C	N 3700	S 3800	11.51	56.49	8.50
2007	8300 C	N 4000	S 4300	11.33	56.77	8.50
2006	8600 C	N 4300	S 4300	11.16	57.49	8.50
2005	7200 C	N 3600	S 3600	11.60	56.20	5.10
2004	7800 C	N 3800	S 4000	11.10	57.00	5.10
2003	7100 C	N 3500	S 3600	10.70	54.30	7.20
2002	8200 C	N 4200	S 4000	10.80	56.30	7.20
2001	6500 C	N 3300	S 3200	10.80	56.00	3.30
2000	7400 C	N 3700	S 3700	10.40	56.50	2.00
1999	6100 C	N 3100	S 3000	10.80	58.70	2.10
1998	6000 C	N 3100	S 2900	10.40	57.30	2.50

Negative Growth

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Property Identification

Site Address: 1502 SEAWAY DR
Sec/Town/Range: 01/35S/40E
Map ID: 24/01C
Zoning: C5

Parcel ID: 2401-501-0279-000-1
Account #: 14814
Use Type: 1000
Jurisdiction: Fort Pierce

Ownership

Belmont Ave Property LLC
2277 N Circle Drive
Palatine, IL 60067-0000

Legal Description

FT PIERCE BEACH S/D BLK 16 LOTS 16 AND E 1/2 OF 17 (0.47 AC - 20,412 SF) (OR 1528-1900)



Current Values

Just/Market Value:	$525,600
Assessed Value:	$525,600
Exemptions:	$0
Taxable Value:	$525,600

Taxes for this parcel: SLC Tax Collector's Office

Total Areas

Land Size (acres):	0.47
Land Size (SF):	20,412

Land Information

Total Area: 20,412 SF / 0.47 acres

Sequence Number	Number/Type of Units	Depth for Front Feet
1	20412 SqFeetRate 2	0

Special Features and Yard Items

Type	Qty	Units	Year Blt

Permits

Number	Date	Description	Amount	Fee
F94-001453	Dec 14, 1994	Roof	$13,000	$13,000
MC2002-116	Dec 27, 2002	Air Conditioning Only	$3,000	$155
DK2002-7	Dec 30, 2002	Dock	$18,000	$355
SH2003-8	Mar 21, 2003	Shed	$1,900	$100
DI2003-5	Mar 24, 2003	Demolition	$0	$100
CR2003-7	May 23, 2003	Alterations/Remodeling	$1,500	$125
MC2003-76	May 23, 2003	Air Conditioning Only	$2,400	$75
DM200563	May 5, 2005	Demolition	$2,440	$100

Notice: This does not necessarily represent all the permits for this property.
Click the following link to check for additional permit data in Fort Pierce

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
May 14, 2002	1528 / 1900	00	WD	S T O F Holdings LTD,	$875,000
Jul 13, 1999	1236 / 2507	00	WD		$560,000

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$525,600
Just/Market:	$525,600
Ag Credit:	$0
Mkt/Asmnt Differential:	$0
Assessed:	$525,600
Exemption(s):	$0
Taxable:	$525,600

Current Year Exemption Value Breakdown

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2012	0041	0	Fort Pierce Stormwater Charge	$0.00

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office .

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2014	$525,600	$525,600	$0	$525,600
2013	$525,600	$525,600	$0	$525,600
2012	$1,051,200	$1,051,200	$0	$1,051,200

This information is believed to be correct at this time but it is subject to change and is not warranted.

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Property Identification

Site Address: SEAWAY DR
Sec/Town/Range: 01/35S/40E
Map ID: 24/01C
Zoning: C5

Parcel ID: 2401-501-0279-010-4
Account #: 176878
Use Type: 1000
Jurisdiction: Fort Pierce

Ownership

Belmont Ave Property LLC
2277 N Circle Drive
Palatine, IL 60067-0000

Legal Description

FT PIERCE BEACH S/D BLK 16 W 1/2 OF LOT 17 AND LOT 18 (0.47 AC - 20,412 SF) (OR 1528-1900)

Current Values

Just/Market Value:	$525,600
Assessed Value:	$525,600
Exemptions:	$0
Taxable Value:	$525,600

Taxes for this parcel: SLC Tax Collector's Office



Total Areas

Land Size (acres):	0.47
Land Size (SF):	20,412

Land Information

Total Area: 20,412 SF / 0.47 acres

Sequence Number	Number/Type of Units	Depth for Front Feet
1	20412 SqFeetRate 2	0

Special Features and Yard Items

Type	Qty	Units	Year Blt

Permits

Number	Date	Description	Amount	Fee

Notice: This does not necessarily represent all the permits for this property.
Click the following link to check for additional permit data in Fort Pierce

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
May 14, 2002	1528 / 1900	00	WD	S T O F Holdings LTD,	$875,000

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$525,600
Just/Market:	$525,600
Ag Credit:	$0
Mkt/Asmnt Differential:	$0
Assessed:	$525,600
Exemption(s):	$0
Taxable:	$525,600

Current Year Exemption Value Breakdown

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2012	0041	0	Fort Pierce Stormwater Charge	$0.00

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office .

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2014	$525,600	$525,600	$0	$525,600
2013	$525,600	$525,600	$0	$525,600

This information is believed to be correct at this time but it is subject to change and is not warranted.

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COPY

JOANNE HOLMAN, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
File Number: 2043318 OR BOOK 1528 PAGE 1900
Recorded:05/16/02 14:56

This instrument prepared by:

Eric Dorsky, Esq.
7320 Griffin Road, Suite 220
Davie, FL 33314

Return to:

Frank H. Fee, III, Esq.
CHB #25

* Doc Assump: $ 0.00
* Doc Tax : $ 6,125.00
* Int Tax : $ 0.00

Property Appraiser's Parcel Identification

2401-501-0279-000/1

COPY

WARRANTY DEED

(STATUTORY FORM - SECTION 689.02, F.S.)

This Indenture, made this 14th day of May, 2002, **Between** S.T.O.F. Holdings, Ltd., a Florida limited partnership, 6300 Stirling Road, Hollywood FL 33024, Grantor; and Belmont Avenue Property, LLC, an Illinois Limited Liability Company, 1515 East Woodfield Road, Second Floor, Schaumburg, IL 60173, Grantee

Witnesseth, That said Grantor, for and in consideration of the sum of Ten ($10.00) Dollars, and other good and valuable considerations to said Grantor in hand paid by said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said Grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in St. Lucie County, Florida, to wit:

Lots 16, 17 and 18, Block 16, Revised Map of Fort Pierce Beach, according to the Plat thereof, as recorded in Plat Book 8, Page 29, of the Public Records of St. Lucie County, Florida, subject to restrictions, reservations, conditions, limitations, easements and rights of way of record, if any, and taxes accruing subsequent to December 31, 2001.

COPY

And the said Grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

"Grantor" and "Grantee" are used for singular or plural, as context requires.

In Witness Whereof, Grantor has hereunto set Grantor's hand and seal the day and year first above written.

COPY

Signed, sealed and delivered in the presence of:

S.T.O.F. Holdings, Ltd.,
a Florida limited partnership,
by and through Seminole Properties
I, Inc., a Florida corporation, its
general partner

Agnes Billie-Motlow
By: Agnes Billie-Motlow
As its: Vice-President/Secretary

Print Name: Eric Darby

Print Name: Ross Hultman

COPY

THE FOREGOING INSTRUMENT ~~was acknowledged before me on this~~ 4 day of May, 2002 by Agnes Billie-Motlow, as the Vice-President and Secretary of Seminole Properties I, Inc., the general partner of S.T.O.F. Holdings, Ltd., on behalf of the corporation and partnership, and who is personally known to me or ~~who has produced~~ _____ ~~as identification~~.

Carol Ann Collier
Notary Public

My commission expires: 3/15/05

Carol Ann Collier
MY COMMISSION EXPIRES
March 15, 2005
#DD003112
Bonded thru
Troy Fain-Insurance
NOTARY PUBLIC, STATE OF FLORIDA

COPY

JOSEPH W. SCHULKE, P.E.
JODAH B. BITTLE, P.E.
WILLIAM P. STODDARD, Ph.D., P.E.

SCHULKE, BITTLE & STODDARD, L.L.C.

CIVIL & STRUCTURAL ENGINEERING • LAND PLANNING • ENVIRONMENTAL PERMITTING

April 30, 2015

Rebecca Grohall
City of Fort Pierce
Planning Department
100 N. US 1
Fort Pierce, FL 34954

Re: Project Narrative
Inlet Palms PD
Parcel ID: 2401-501-0279-000-1 and 2401-501-0279-010-4

Dear Ms. Grohall:

The current property is Zoned Hutchinson Island Medium Density Residential Zone (R-4A). This zoning is primarily for a residential use. This may be a single family dwelling, duplex, triplex, quadplex or townhome. The proposed project would be considered as a townhome project. We would gladly have used the existing zoning and the existing zoning requirements. Unfortunately, the Zoning code is written in such a way that will not allow this site to be built as a townhome design. The following is a list of items that cannot be met by this project for the existing zoning requirements:

1. Sec 22-27.1 (b)(1)f. and Sec 22-3 Townhome Development Definition.
   Required: The minimum lot width for townhome developments shall be two hundred (200) feet.
   Proposed: The current lot width is 180.1' along the south property line and 171.16' along the north property line. This is substantially lower than the 200 foot minimum lot width.

2. Sec 22-27.1 (b)(1)f.
   Required: Townhome Developments shall be subdivided into a minimum lot width of sixteen (16) feet and a maximum lot width of twenty-four (24) feet.
   Proposed: Unit/Lot 2 and 5 are a minimum of 24.7' wide. Unit/Lot 7 is 28.0' wide. All three of these Unit/Lots do not meet the code requirement of a maximum of 24.0'.

3. Sec 22-27.1 (b)(1)i.
   Required: The minimum lot depth for townhome development shall be ninety (90) feet.
   Proposed: Unit/Lot 7 is proposed with a depth of 67.9'. This does not meet the code requirement of 90.0'.

4. Sec 22-27.1 (b)(2)h.
   Required: The minimum distance between residential buildings shall be twenty (20) feet except that screen porches located on the ground floor may project into the minimum distance, and except that screen porches in owner occupied condominium projects that maintain a minimum building separation of twenty-eight (28) feet or more may be enclosed with glass.
   Proposed: The distance between Unit 3 and Unit 4 is 7.3'. This does not meet the 20.0' required setback.

1717 INDIAN RIVER BLVD., SUITE 201, VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com
Certification of Authorization No: 00008668

5. Sec 22-3 Definition of Dwelling, townhome.
   Required: A single dwelling unit attached by at least one but no more than two-party wall(s) along more than fifty (50) per cent of the maximum depth of the unit to one or more other dwelling unit on a continuous foundation, with said party wall(s) being centered on the common property line(s) between adjacent lots.
   Proposed: Unit/Lot 7 does not have a common wall with any other unit. This Unit/Lot does not meet this requirement.

These five requirements cannot be met by the developer for the project that is being submitted for site plan approval. We have no choice but to submit for the rezoning to Planned Development (PD).

The Development will be classified as Anglo Caribbean Transitional. This meets the intent of the development Objectives of the City and the City's Comprehensive Plan.

The property will be divided into seven (7) lots to serve seven (7) multi-family units. Each unit will be owned fee simple. All areas outside each individual lot will be maintained by the Homeowners Association.

The parcel size is 0.828 acres. The building lot coverage is 0.228 acres or 27.6%. The density proposed is 8.45 units/acre. The total amount of open space is 0.238 acres or 28.7%. We have no non-residential acreage.

The development will be built in one single phase. We are not proposing any phasing at this time.

The list of exceptions are depicted at the beginning of the report and listed on the site plan.

If you have any questions or require additional information, please feel free to contact me.

Sincerely,

Jodah B. Bittle, P.E.

PLANNED DEVELOPMENT

FOR

INLET PALMS

SECTION 01, TOWNSHIP 35 S, RANGE 40 E
CITY OF FT. PIERCE, FLORIDA

LOCATION MAP



LEGAL DESCRIPTION

LOTS 16, 17 AND 18, BLOCK 16, REVISED MAP OF FT. PIERCE BEACH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 29, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

DRAWING INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS AND POLLUTION PREVENTION
3	POLLUTION PREVENTION DETAILS
4	SOIL BORINGS
5	PRELIMINARY PLAT
6	SITE PLAN
7	PAVING, GRADING AND DRAINAGE PLAN
8	UTILITY PLAN
9	LANDSCAPE PLAN
10	CROSS SECTIONS
11-13	MISCELLANEOUS DETAILS
14	AERIAL
ATTACHED	SURVEY

SITE DATA

OWNER	BELMONT AVE PROPERTY, LLC 2277 N. CIRCLE DRIVE PALATINE, IL 60067-0000
DEVELOPER	FOGLIA CUSTOM HOMES 1555 INDIAN RIVER BLVD, UNIT B141 VERO BEACH, FL 32960
ENGINEER	SCHULKE, BITTLE & STODDARD, L.L.C. JODAH B. BITTLE, P.E. 57396 1717 INDIAN RIVER BLVD. SUITE 201 VERO BEACH, FL 32960 (772) 770-9622
SURVEYOR:	MERIDIAN LAND SURVEYORS CHARLES BLANCHARD, PSM #5755 1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FL 32960 PH. (772) 794-1213
EXISTING USE	UNDEVELOPED (PREVIOUSLY A HOTEL)
PROPOSED USE	SEVEN (7) MULTI-FAMILY UNITS
PROJECT LOCATION	NORTH SIDE OF SEAWAY DRIVE AT DESOTO STREET
SITE ADDRESS	1502 SEAWAY DRIVE, FT. PIERCE, FL
PARCEL I.D. NUMBER	2401-501-0279-000-1 AND 2401-501-0279-010-4
CURRENT LAND USE	HIR (HUTCHINSON ISLAND RESIDENTIAL)
CURRENT ZONING	R-4A (HUTCHINSON ISLAND MEDIUM DENSITY RESIDENTIAL)
PROPOSED ZONING	PD (PLANNED DEVELOPMENT)

DEVELOPMENT PARAMETERS :

	EXISTING R-4A ZONING	PROPOSED PD ZONING	PROPOSED DEVELOPMENT
MIN. OVERALL LOT WIDTH	200'	175'	178.8'
MIN. INTERIOR LOT SIZE	1,500 SF	1,500 SF	2,949 SF
MAX. INTERIOR LOT WIDTH	24'	25'	24.7'
MIN. INTERIOR LOT DEPTH	90'	65'	67.9'
MIN. YARD SETBACKS:			
FRONT (SOUTH)	10'	10'	10.0'
SIDE (WEST)	10'	10'	15.0'
SIDE (EAST)	10'	10'	10.0'
REAR (NORTH)	15'	15'	15.0'
DISTANCE BETWEEN BLDGS.	20'	5'	7.0'
MAX. LOT COVERAGE BY BLDGS	45%	45%	27.6%
MIN. OPEN SPACE	25%	25%	28.7%
MAX. IMPERVIOUS AREA	75%	75%	71.3%
MAXIMUM DENSITY	8 UNITS/ACRE	8.5 UNITS/ACRE	8.45 UNITS/ACRE
A/C/ PAD SETBACK	10'	4'	4'
MAX. BLDG. HEIGHT	45'	*SEE BELOW	*SEE BELOW

* UNITS 1 AND 3 - 43'-3 1/4" ABOVE VE 7' NAVD
UNIT 2 - 47'-4" ABOVE VE 7' NAVD
UNITS 4 AND 6 - 43'-3 1/4" ABOVE VE 7' NAVD
UNIT 5 - 47'-4" ABOVE VE 7' NAVD
UNIT 7 - 43'-8 3/4" ABOVE DATUM 6' NAVD

AREA CALCULATIONS:

SITE AREAS:			PROPOSED
DEVELOPABLE AREA::	36,055 SF	0.828 AC	100.0%
IMPERVIOUS AREA:	25,695 SF	0.590 AC	71.3%
BUILDING AREA:	9,938 SF	0.228 AC	27.6%
DRIVEWAY/CONCRETE/PORCH AREA:	10,912 SF	0.251 AC	30.3%
POOL/PATIO/WALKWAY AREA:	4,845 SF	0.111 AC	13.4%
PERVIOUS AREA:	10,360 SF	0.238 AC	28.7%
GREEN SPACE:	10,360 SF	0.238 AC	28.7%

NATIVE VEGETATION/PRESERVATION:
N/A. NO PRESERVATION REQUIRED, NO NATIVE HABITAT IS EXISTING

PARKING CALCULATIONS:
REQUIRED: 2 SPACE PER UNIT
7 UNITS X 2 SPACES/UNIT = 14 SPACES
PROVIDED: 14 INTERIOR DRIVEWAY PARKING SPACES

AVERAGE DAILY TRIPS:
PROPOSED USE: PER ITE 9TH EDITION TRIP GENERATION MANUAL, LAND USE 230
7 MULTI-FAMILY UNITS X 7.78 TRIPS/UNIT = 55 TRIPS

CONSTRUCTION SCHEDULE:

DATE OF COMMENCEMENT	DATE OF COMPLETION
8/15	1/16

GENERAL NOTES

1. PROPOSED PUBLIC WATER SUPPLY - FT. PIERCE UTILITY AUTHORITY
2. PROPOSED PUBLIC SEWER - FT. PIERCE UTILITY AUTHORITY
3. GARBAGE IS HANDLED WITH CANS STORED IN THE UNITS. NO DUMPSTER PROPOSED.
4. THE PARCEL OF LAND SHOWN HEREON APPEARS TO BE IN FLOOD ZONE AE-6, AE-7, C & VE-8 PER FLOOD INSURANCE RATE MAP #12111C0183 J, DATED FEBRUARY 16TH, 2012.
5. ALL CONSTRUCTION ON SITE TO BE DONE PER ALL CITY OF FT. PIERCE STANDARDS AND SPECIFICATIONS.
6. ALL UTILITY CONSTRUCTION ON SITE TO BE DONE PER F.P.U.A. UTILITY STANDARDS AND SPECIFICATIONS, LATEST EDITION.
7. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST VERSIONS OF THE M.U.T.C.D., FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, AND CITY OF FT PIERCE TYPICAL PAVEMENT MARKINGS AND SIGNING DETAILS. IN ADDITION, ALL PAVEMENT MARKINGS WITHIN THE RIGHT-OF-WAY SHALL BE INSTALLED IN THERMO-PLASTIC.
8. EXISTING DRIVES AND/OR INTERSECTIONS SHOWN ARE WITHIN THE 300' RADIUS REQUIRED FROM THE PROPOSED SITE.
9. THE EXISTING SPEED LIMIT FOR SEAWAY DRIVE IS 35 M.P.H.
10. ALL PROPOSED TRAFFIC CONTROL DEVICES SHOWN ON SITE TO BE PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
11. THE SITE LIGHTING (SOURCE OF ILLUMINATION) CANNOT BE VISIBLE FROM THE SITE.
12. ANY NUISANCE/EXOTIC PLANTS IN THE DEVELOPED AREA WILL BE REMOVED.
13. AT INTERSECTIONS, WALLS, FENCES, PLANTS OR SIGHT OBSTRUCTIONS OF ANY KIND OVER 18" IN HEIGHT ARE PROHIBITED WITHIN THE SITE DISTANCE TRIANGLE AS REQUIRED BY FDOT INDEX 546, 2014 EDITION.
14. ANY DISTURBED AREAS ON SITE OR IN THE COUNTY RIGHT-OF-WAY TO BE SODDED.
15. RUN-OFF FROM ROOF TO BE DIRECTED TO STORMWATER SYSTEM.
16. ALL LIGHTS MUST MEET THE FOLLOWING CRITERIA:
    - ALL POLES MUST BE BLACK OR BRONZE
    - ALL LIGHTS MUST BE DIRECTED DOWNWARD, WITH A 90 DEG. CUT-OFF
    - LIGHTS MUST NOT CAUSE GLARE ONTO ADJACENT R/W OR PROPERTIES.
17. ALL STOP SIGNS (R1-1) SHALL BE 30"
18. NO DEWATERING BETWEEN 8 PM AND 6 AM WITHOUT CITY OF FT PIERCE APPROVAL.
19. AN ENTRANCE GATE IS PROPOSED FOR THIS SITE.
20. CITY OF FT. PEIRCE OR FDOT MAY HAVE UNDERGROUND CONDUIT FOR TRAFFIC SIGNAL INTERCONNECTIONS IN THIS AREA AS WELL AS OTHER TRAFFIC SIGNAL EQUIPMENT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT SUNSHINE STATE ONE CALL SYSTEM AT 1-800-432-4770 FOR LOCATIONS OF THIS EQUIPMENT AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION.
21. ALL SOLID, NON-BREAKAWAY OBJECTS (GATE POSTS/COLUMNS, BOLLARDS, STREET LIGHT POLES, ETC.) ALONGSIDE INTERIOR STREETS AND DRIVING AISLES SHALL BE LOCATED OUTSIDE THE CLEAR ZONE. FOR STREETS AND DRIVING AISLES WITH A DESIGN SPEED OF 25 MPH OR LESS, THE MINIMUM CLEAR ZONE IS 2.5 FEET FROM THE FACE OF THE CURB (TYPE 'D' OR 'F'), OR 6 FEET FROM THE EDGE OF THE TRAVEL LANE. THIS APPLIES TO PUBLIC AND PRIVATE PROPERTY.
22. THE BEARING BASE FOR THIS SURVEY IS A GRID BEARING OF S46°30'43"W, ALONG THE NORTH R/W LINE OF SEAWAY DRIVE AND BASED ON FOUND MONUMENTATION.
23. THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. THE BENCHMARK IS CGS MONUMENT G 231 1965, ELEVATION 4.47' NAVD. SECONDARY BENCHMARK IS AS SHOWN HEREON. THE CONVERSION TO NGVD'29 IS BY ADDING 1.499 FT.
24. ALL CROSS WALKS SHALL HAVE TRUNCATED DOME WARNING SURFACE SYMBOL ON THE SIDEWALK ADJACENT TO THE PAVED DRIVEWAY PER FDOT INDEX NO. 304.
25. ANY ABANDONED FLOW WELLS FOUND ON SITE SHALL BE PLUGGED PURSUANT TO D.O.H. AND SFWMD REGULATIONS.
26. ALL PAVEMENT MARKINGS IN THE RIGHT-OF-WAY SHALL BE 90 MIL., EXTRUDED TYPE, ALKYD BASE THERMOPLASTIC.
27. ALL HANDICAPPED PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 17346, 2014 EDITION.
28. ALL STOP SIGNS SHALL BE HIGH INTENSITY RETRO-REFLECTIVETY
29. ALL UTILITIES MUST BE PLACED UNDERGROUND.
30. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITY LINES AND STRUCTURES PRIOR TO CONSTRUCTION.
31. PROPANE TANKS TO BE UNDERGROUND.

SCHULKE, BITTLE & STODDARD, L.L.C.

CIVIL & STRUCTURAL ENGINEERING · LAND PLANNING · ENVIRONMENTAL PERMITTING

CERTIFICATION OF AUTHORIZATION NO.: 00008668

1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com

ENGINEER CERTIFICATION:

DATE:

☐ JOSEPH W. SCHULKE, P.E. REG. No 47048
☐ JODAH B. BITTLE, P.E. REG. No 57396
☐ WILLIAM P. STODDARD, Ph.D., P.E. REG. No 57605

EROSION CONTROL NOTES

1. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED, COVERED OR CONTAINED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED.
6. AFTER ANY SIGNIFICANT RAINFALL, (½" OR GREATER) SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
7. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, SLOPE DRAIN STRUCTURE OR APPROVED CONTROL.
8. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM WATER SYSTEM, DITCH OR CHANNEL. ALL STORM WATER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
9. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION.
10. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT CONTROLS. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
11. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS,PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
13. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND EROSION.
14. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN INDEX NUMBERS 101, 102 AND 103 OF F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, IN ADDITION TO THESE PLANS.
15. CONTRACTOR IS RESPONSIBLE FOR ALL SURFACE WATER DISCHARGES, RAINFALL RUN-OFF OR DEWATERING ACTIVITIES.
16. CONTRACTOR MUST INCORPORATE ALL BMP'S NECESSARY TO MEET OR EXCEED STATE WATER QUALITY REQUIREMENTS.
17. POLLUTION PREVENTION PLAN IS A MINIMUM GUIDELINE ONLY. ADDITIONAL BMP'S MAYBE NECESSARY AT CONTRACTOR'S EXPENSE. NOI TO BE POSTED ON SITE.
18. NO TURBID DISCHARGE, TURBIDITY READINGS ARE REQUIRED ONCE A WEEK AND MUST BE REPORTED TO THE PROJECT ENGINEER.
19. DEWATERING ACTIVITIES:
    A. DISCHARGE MUST NOT EXCEED STATE WATER QUALITY STANDARDS.
    B. CONTRACTOR MUST HAVE OR OBTAIN A TRANSFERABLE SJRWMD CONSUMPTIVE USE PERMIT KNOWN AS A "NOTICED GENERAL PERMIT FOR SHORT TERM CONSTRUCTION DE-WATERING". UNLESS DEWATERING ACTIVITIES WILL RESULT IN LESS THAN 300,000 GPD FOR 30 DAYS OR LESS.
    C. NO HYDRAULIC PUMPS MAY BE USED FOR DEWATERING UNLESS APPROVED BY THE WATER MANAGEMENT DISTRICT FOR THAT AREA. DEWATERING EXISTING STORMWATER RETENTION AREAS (PONDS/LAKES) MAY BE EXEMPT FROM THIS CONDITION. CONTRACTOR TO CONFIRM WITH SJRWMD.
    D. NO TURBID DISCHARGE. TURBIDITY READINGS ARE REQUIRED ONCE A WEEK AND MUST BE REPORTED TO THE PROJECT ENGINEER AND TO CITY OF FT. PIERCE.
20. SEE ADDITIONAL DETAILS, SPECIFICATIONS AND REQUIREMENTS OF SHEET 4, 11-13.

STORMWATER POLLUTION PREVENTION PLAN

A SITE PLAN MUST BE DEVELOPED AND MUST CONTAIN, AT A MINIMUM, THE FOLLOWING INFORMATION:

1. DRAINAGE PATTERNS,- SEE SURVEY AND DRAINAGE PLAN SHEET 3 & 7.
2. APPROXIMATE SLOPES AFTER MAJOR GRADING ACTIVITIES - SEE SHEET 7.
3. AREAS OF SOIL DISTURBANCE, - SEE SHEETS 2, AND THIS SHEET.
4. OUTLINE ALL AREAS THAT ARE NOT TO BE DISTURBED - N/A.
5. LOCATION OF ALL MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS,-THIS SHEET.
6. THE LOCATION OF EXPECTED STABILIZATION PRACTICES, -THIS SHEET.
7. NO WETLANDS AND SURFACE WATERS .
8. LOCATIONS WHERE STORMWATER MAY DISCHARGE TO A SURFACE WATER OR MS4. SEE SHEET 7.

DESCRIBE THE NATURE OF THE CONSTRUCTION ACTIVITY:
DEMOLITION, LAND CLEARING, EARTHWORK, PAVING AND UTILITY WORK FOR BUILDING, PARKING AND SITE IMPROVEMENTS.

DESCRIBE THE INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:
1. SITE PREPARATION AND STABILIZE CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCE AROUND PERIMETER OF SITE. INSTALL TURBIDITY BARRIERS AT ALL OUTFALL LOCATIONS. CLEAR LAND. CONSTRUCT BERM ON PERIMETER AND TEMPORARY SWALES AS SHOWN ON PLANS. BERM SHALL BE CONSTRUCTED USING INITIAL IMPORTED FILL MATERIAL. THE BERM AND SWALE SHALL BE SEEDED.

TOTAL AREA OF THE SITE: 0.828 ACRES
TOTAL AREA OF THE SITE TO BE DISTURBED: 0.828 ACRES

EXISTING DATA DESCRIBING THE SOIL OR QUALITY OF ANY STORMWATER DISCHARGE:
SEE SOIL BORINGS BY SHEETS 2. NO DISCHARGE FROM DISTURBED AREAS IS ANTICIPATED.

DRAINAGE AREA SIZE FOR EACH DISCHARGE POINT:
ENTIRE SITE = 0.828 ACRES

LATITUDE AND LONGITUDE OF THE SITE:
LATITUDE = N 27° 28' 04.1"
LONGITUDE = W 80° 17' 53.9"

BEST MANAGEMENT PRACTICES (BMPS) AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE AND TIME FRAMES IN WHICH THE CONTROLS WILL BE IMPLEMENTED:
THE CONTRACTOR WILL USE HAY BALES, SILT FENCE, FILTER BARRIERS, AND OTHER BMPS. THE TIME FRAMES FOR CLEARING, EARTHWORK, AND ANTICIPATED BMP'S ARE:

1. INSTALL SILT FENCE AT PERIMETER OF SITE AND SILT BARRIERS AT DOWNSTREAM DITCHES/SWALES.
2. CLEAR/GRUB AREA NECESSARY FOR TEMPORARY GRAVEL DRIVEWAY AND ADJACENT SWALE.
3. CONSTRUCT TEMPORARY GRAVEL DRIVEWAY WITH SWALE, AND GRADE/SOD SWALE AT ENTRANCE.
4. CLEAR BALANCE OF SITE.
5. CONSTRUCT 12" RCP AND MITERED END SECTIONS.
6. IMPORT FILL MATERIAL:
   -CONSTRUCT CONTAINMENT BERMS . SEED/MULCH BERMS.
   -FILL BALANCE OF SITE.
7. MAINTAIN DOWNSTREAM SILT BARRIERS AND PERIMETER SILT FENCE, DURING CONSTRUCTION.
8. INCORPORATE ADDITIONAL BMP'S WHEN NEEDED DURING THE COURSE OF CONSTRUCTION.
   -POLLYWADDLE/ SILT FENCE/ FILTER SACKS AS INLETS AND PIPES ARE INSTALLED.
   -PROVIDE STOCKPILE PROTECTION, CONCRETE/ STUCCO WASH AREAS, AND OTHER BMP'S WHEN NECESSARY TO CONTAIN PROPOSED WORK.

TEMPORARY AND PERMANENT STABILIZATION PRACTICES:
-TEMP. HAY BALES/SLIT FENCES/FLOATING TURBIDITY BARRIERS PER PLAN. FILTER FABRIC SHALL BE PLACED UNDER THE ROCK GRAVEL DRIVEWAY, AT ALL SWALE OUTFALLS, AND RETENTION POND OUTFALLS.
-PERM. SEEDED/MULCHED,SOD. CONTROLLED GRADING AND DRAINAGE TO DETENTION BASINS.
-STABILIZE ALL DE-NUDED AREAS IF LEFT UNDISTURBED FOR MORE THAN 7 DAYS - USE RYE GRASS PER MANUFACTURER'S APPLICATION RATES, AND MULCHED WITH STRAW AT 4000 LB PER ACRE.

STRUCTURAL CONTROLS TO BE IMPLEMENTED TO DIVERT STORMWATER FLOW FROM RECEIVING WATERS:
-TEMP. GRAVEL ENTRANCE ROAD, GRADED TO DRAIN TO A TEMPORARY SEDIMENT SWALE OR RETENTION AREA.
-TEMP. DRAINS TO RETENTION PONDS
-TEMP. BERMS AT PROJECT PERIMETER - PER PLAN.
-INLETS/OUTLETS WILL BE PROTECTED WITH FILTER FABRIC AND PROPERLY INSTALLED HAY BALES.
-SILT FENCE SHALL BE PLACED AROUND THE ENTIRE PERIMETER OF DISTURBED AREAS.
-A DOUBLE ROW OF SILT FENCE WILL BE PROVIDED AROUND ALL STOCK PILE AREAS.

PERMANENT STORMWATER MANAGEMENT CONTROLS SUCH AS, DETENTION OR RETENTION SYSTEMS OR VEGETATED SWALES.
-WET DETENTION SYSTEMS INCORPORATED AS PERMANENT BMP FOR WATER QUALITY CONTROL.

DESCRIBE IN DETAIL CONTROLS FOR THE FOLLOWING POTENTIAL POLLUTANTS:
WASTE DISPOSAL:
-ON SITE WASTE WILL BE CONTAINERIZED, CONTRACTOR IS RESPONSIBLE FOR RECYCLING ALL WASTE MATERIALS, WITH A MINIMUM REQUIREMENT OF 75%.
-CONCTERE/ STUCCO WASH AREA SHALL BE PROVIDED.
-STOCKPILE AREAS SHALL BE PROTECTED WITH SILT FENCE AND STABILIZED/ SEEDED IF LEFT UNATTENDED FOR MORE THAN 7 DAYS.

OFFSITE VEHICLE TRACKING:
-PROVIDE HARD SURFACE AT TEMP. DRIVEWAY (ROCK/GRAVEL DRIVEWAY).
-REGULAR MAINTENANCE OF ADJACENT ROAD RIGHT OF WAY, INCLUDING STREET SWEEPING, & RUT REPAIR IN NON-PAVED AREAS.

APPLICATION RATES OF ALL FERTILIZERS, HERBICIDES AND PESTICIDES:
-NONE PROPOSED.

STORAGE, APPLICATION, GENERATION AND MIGRATION OF ALL TOXIC SUBSTANCES:
-NONE PROPOSED.

DESCRIPTION OF THE MAINTENANCE PLAN FOR ALL STRUCTURAL AND NON-STRUCTURAL CONTROLS.
-CONTRACTOR SHALL HAVE SWPPP COMPONENTS INSPECTED BY A FDEP CERTIFIED INSPECTOR AND MAINTAIN ALL CONTROLS DAILY, AND HAVE WEEKLY SWPPP INSPECTION REPORTS PREPARED, AND WITHIN 24 HOURS OF THE END OF ANY RAINFALL EVENT THAT IS ½" OR GREATER.
-ENGINEER SHALL INSPECT PERIODICALLY.

NOTES:
1.THIS PLAN (SHEETS 4 AND 5), COPY OF FDEP NOI (STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES) AND ALL REQUIRED INSPECTION REPORTS, TESTS, AND ALL OTHER DOCUMENTATION SHALL BE KEPT AT THE PROJECT SITE.
2.THE FOLLOWING CERTIFICATION SHALL BE COMPLETED BY AL CONTRACTORS/ SUB-CONTRACTORS RESPONSIBLE FOR ANY PORTION OF THE IMPLEMENTATION OF THE S.W.P.P.P.:

CERTIFICATION:
" I CERTIFY UNDER THE PENALTY OF LAW THAT I UNDERSTAND AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER,"

SWPPP DESCRIPTION OF WORK/ RESPONSIBILITY	NAME TITLE	CONTRACTOR OR SUB CONTRACTOR (NAME, ADDRESS, PHONE)	NAME/SIGNATURE TO CERTIFICATION	DATE
			BY: SIGNATURE	
			BY: SIGNATURE	
			BY: SIGNATURE	

PLAN PREPARATION:
1. THIS PLAN ORIGINALLY PREPARED BY THE OWNER'S ENGINEER. THIS PLAN WILL BE MADE AVAILABLE TO CONTRACTOR TO EDIT, CHANGE, MODIFY, AS IT DEEMS NECESSARY FOR COMPLIANCE WITH FDEP REGULATIONS, PERMIT CONDITIONS, AND AS REQUIRED FOR CONTRACTOR TO SIGN THE CERTIFICATION BELOW.
2. THE FOLLOWING CERTIFICATION SHALL BE SIGNED BY THE ENTITY (CONTRACTOR) RESPONSIBLE FOR SWPP PLAN IMPLEMENTATION:

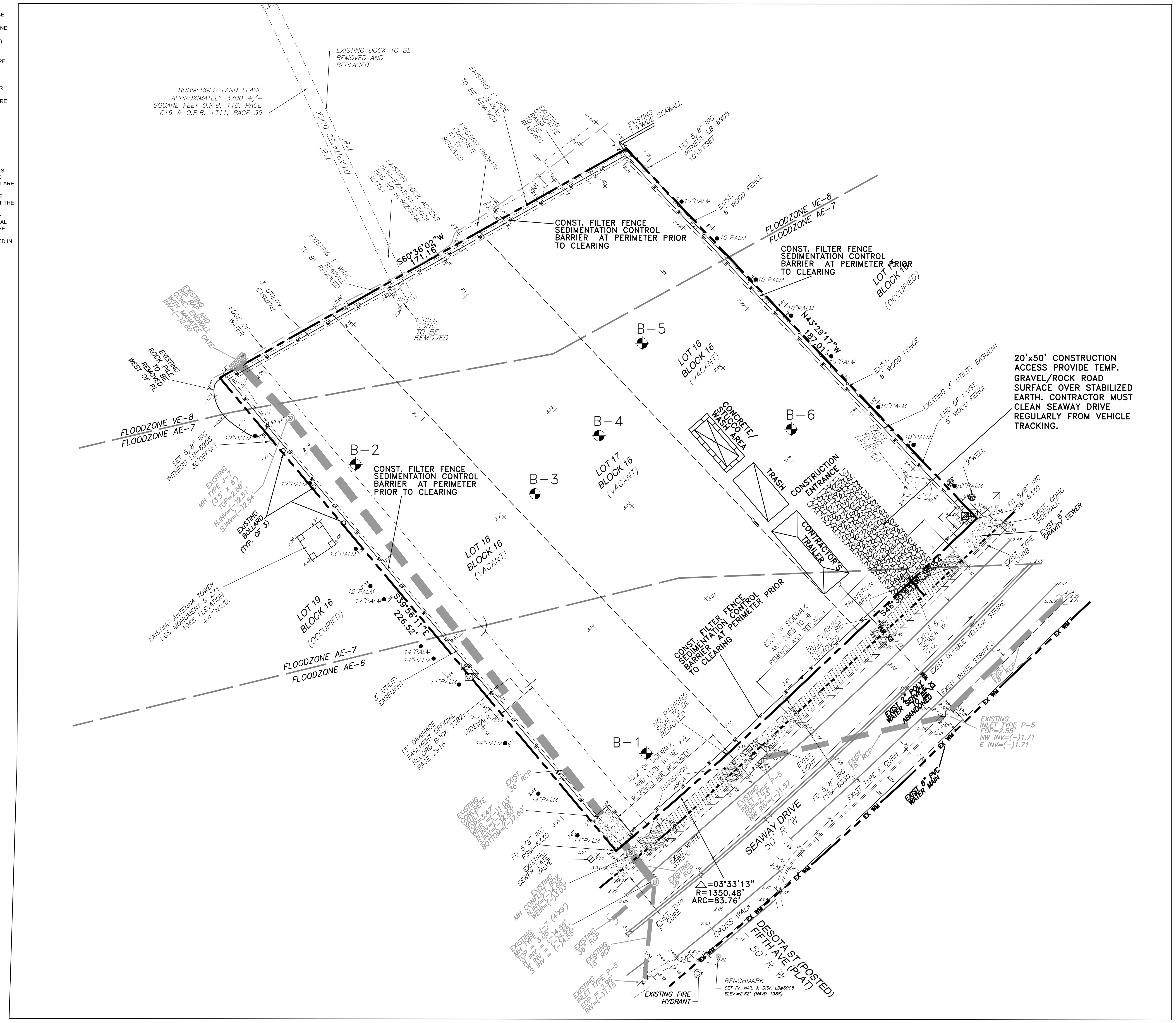
" I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE 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."

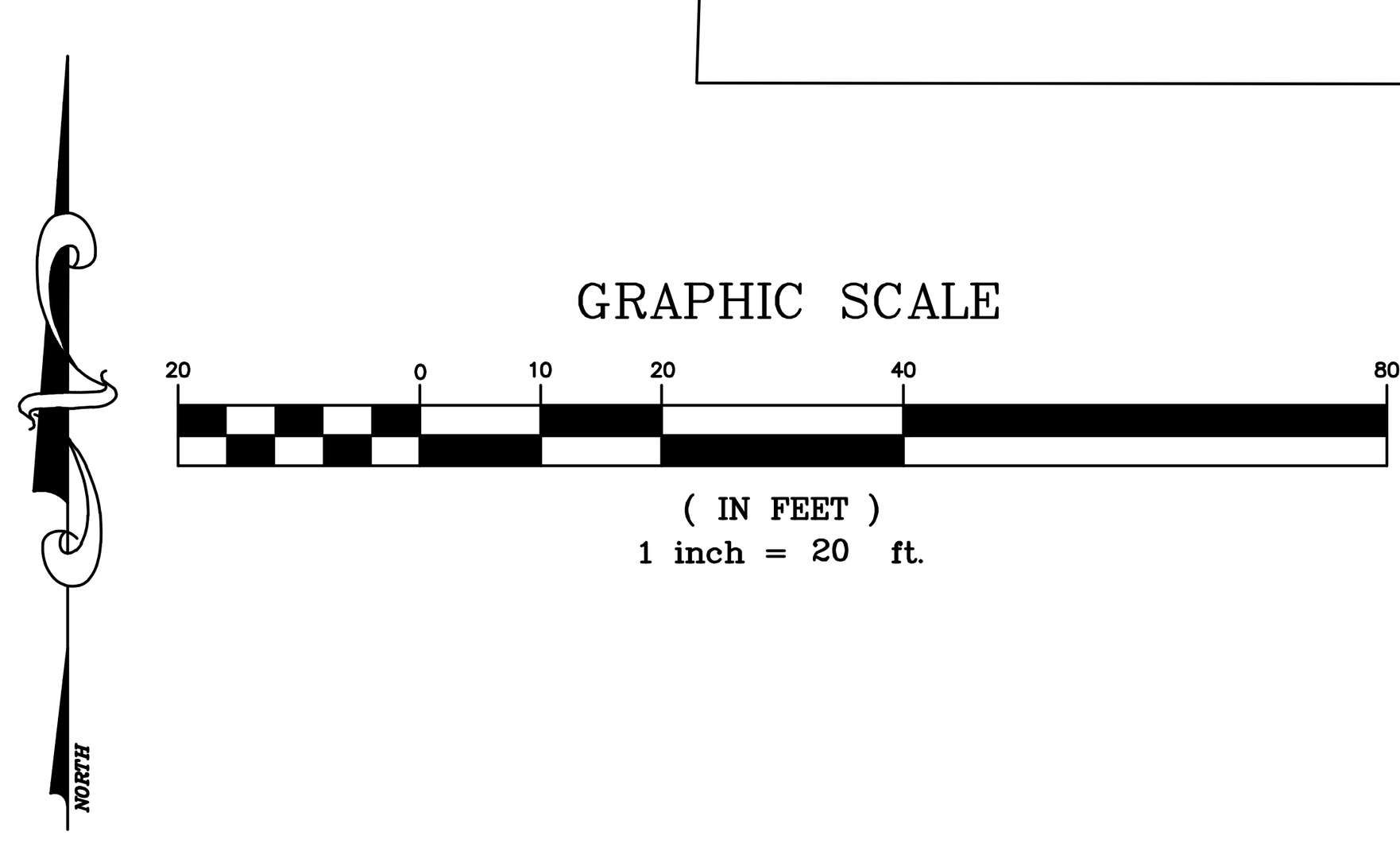
BY:______________________ DATE:__________.

SIGNATURE______________________.

ARCHAEOLOGICAL:
IF PREHISTORIC OR HISTORIC ARTIFACTS, SUCH AS POTTERY OR CERAMICS, STONE TOOLS, OR METAL IMPLEMENTS, OR ANY OTHER PHYSICAL REMAINS THAT COULD BE ASSOCIATED WITH THE NATIVE AMERICAN CULTURES, OR EARLY COLONIAL OR AMERICAN SETTLEMENT ARE ENCOUNTERED AT ANY TIME WITHIN THE PROJECT SITE AREA, THE PERMITTED PROJECT SHOULD CEASE ALL ACTIVITIES INVOLVING SUBSURFACE DISTURBANCE IN THE IMMEDIATE VICINITY OF SUCH DISCOVERIES. THE PERMITEE, OR OTHER DESIGNEE, SHOULD CONTACT THE FLORIDA DEPARTMENT OF STATE, DIVISION OF HISTORICAL RESOURCES, REVIEW AND COMPLIANCE SECTION AT (850) 245-6333 OR (800) 847-7278, AS WELL AS THE APPROPRIATE PERMITTING AGENCY OFFICE. PROJECT ACTIVITIES SHOULD NOT RESUME WITHOUT VERBAL AND/OR WRITTEN AUTHORIZATION FROM THE DIVISION OF HISTORICAL RESOURCES. IN THE EVENT THAT UNMARKED HUMAN REMAINS ARE ENCOUNTERED DURING PERMITTED ACTIVITIES, ALL WORK SHALL STOP IMMEDIATELY AND THE PROPER AUTHORITIES NOTIFIED IN ACCORDANCE WITH SECTION 872.05, FLORIDA STATUTES.

EROSION AND SEDIMENTATION CONTROL
A. THE LAND DISTURBING ACTIVITY SHALL CONFORM TO EXISTING TOPOGRAPHY AND SOIL TYPE SO AS TO CREATE THE LOWES PRACTICAL EROSION POTENTIAL.
B. LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN A MANNER MINIMIZING EROSION.
C. THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSIVE ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM.
D. EROSION CONTROL MUST BE STRICTLY MAINTAINED DURING CUT AND FILL OPERATIONS
E. DISTURBED SOIL SHALL BE STABILIZED AS QUICKLY AS PRACTICABLE.
F. WHENEVER FEASIBLE, NATURAL VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT.
G. TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT.
H. PERMANENT VEGETATION AND STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICABLE.
I. ADEQUATE PROVISIONS MUST BE PROVIDED TO MINIMIZE DAMAGE FROM SURFACE WATER TO THE CUT FACE OF EXCAVATION OR THE SLOPING SURFACE OF FILLS.
J. TO THE EXTENT NECESSARY, SEDIMENT IN RUNOFF WATER MUST BE TRAPPED BY THE USE OF DEBRIS BASINS, SEDIMENT BASINS, SILT TRAPS OR SIMILAR MEASURESUNTIL HE DISTURBED AREA IS STABILIZED.
K. CUTS AND FILLS MUST BE CONSTRUCTED IN SUCH A MANNER THAT EROSION AND RUNOFF FROM THE SITE DOES NOT ENDANGER ADJOINING PROPERTY.
L. FILLS MAY NOT ENCROACH UPON NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS IN A MANNER SO AS TO ADVERSELY AFFECT OTHER PROPERTY OWNERS WITHOUT ADEQUATE PROVISIONS FOR AN EQUIVALENT ALTERANTE SYSTEM WITH A POSITIVE OUTFALL.
M. ALL R.O.W.'S, WATERWAYS, STREETS AND SIDEWALKS SHALL BE BUFFERED BY A TWENTY (20) FOOT WIDE STRIP OF GRASS OR OTHER SUITABLE MEANS.
N. GRADING EQUIPMENT MUST CROSS FLOWING STREAMS BY MEANS OF BRIDGES OR CULVERTS EXCEPT WHEN SUCH METHODS NOT FEASIBLE AND PROVIDED IN ANY CASE, THAT SUCH CROSSINGS ARE KEPT TO A MINIMUM AND SEDIMENTATION CONTROL DEVICES ARE PROVIDED.





Legend & Abbreviations: (symbols not scaleable for size)

PLS	PROFESSIONAL LAND SURVEYOR	(P)	PLAT
PSM	PROFESSIONAL SURVEYOR & MAPPER	(C)	CALCULATED
LB	LAND SURVEYING BUSINESS		TRAFFIC CONTROL BOX
℄	CENTERLINE		GUY WIRE
R	RADIUS		WOOD UTILITY POLE
L	LENGTH		TELEPHONE SERVICE
△	DELTA ANGLE		CABLE T.V. BOX
E/P	EDGE OF PAVEMENT		ELECTRIC BOX
B/C	BACK OF CURB		LIGHT POST
B.M.	BENCHMARK		WELL
POC	POINT OF COMMENCEMENT		HYDRANT
POB	POINT OF BEGINNING		GATE VALVE
○	(PCP) PERMANENT CONTROL POINT		IRRIGATION VALVE
PCP	PERMANENT CONTROL POINT		WATER METER
	(PRM) PERMANENT REFERENCE MONUMENT		SANITARY MANHOLE
PRM	PERMANENT REFERENCE MONUMENT		SANITARY SERVICE
	(IP) IRON PIPE		SEPTIC TANK
IP	IRON PIPE		DRAINAGE MANHOLE
◉	(IRC) IRON ROD & CAP		CURB INLET
IRC	IRON ROD & CAP		SURFACE INLET
	(CM) CONCRETE MONUMENT		MITERED END SECTION
CM	CONCRETE MONUMENT		CONCEPTUAL DRAINAGE
FD	FOUND		STREET SIGN
(M)	MEASURED		

23.5	PROPOSED GRADE
NAVD	NORTH AMERICAN VERTICAL DATUM
x23.5	TYPICAL ELEVATION
A/C	AIR CONDITIONER
CONC.	CONCRETE
F.F.	FINISH FLOOR
BSB	BUILDING SETBACK LINE
EL./ELEV.	ELEVATION
R\W	RIGHT OF WAY
AB	AS-BUILT
P/K	PARKER-KALON

HATCH LEGEND

- PROPOSED BRICK PAVERS
- EXISTING CONCRETE TO REMAIN
- PROPOSED CONCRETE
- PROPOSED BUILDING FOOTPRINT
- EXISTING SIDEWALK TO BE REMOVED
- EXISTING CURB TO BE REMOVED

MARK	REVISION	DATE
1	REVISED PER COFP	5/29/15

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DRAWING 15-053
DESIGNED J.B.B.
DRAWN J.B.B.
CHECKED J.B.B.
SCALE 1:20
DATE 4/15/2015

SCHULKE, BITTLE & STODDARD, L.L.C.
CIVIL & STRUCTURAL ENGINEERING · LAND PLANNING · ENVIRONMENTAL PERMITTING
CERTIFICATION OF AUTHORIZATION NO.: 00008668
1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com

EXISTING CONDITIONS/ DEMOLITION AND POLLUTION PREVENTION PLAN

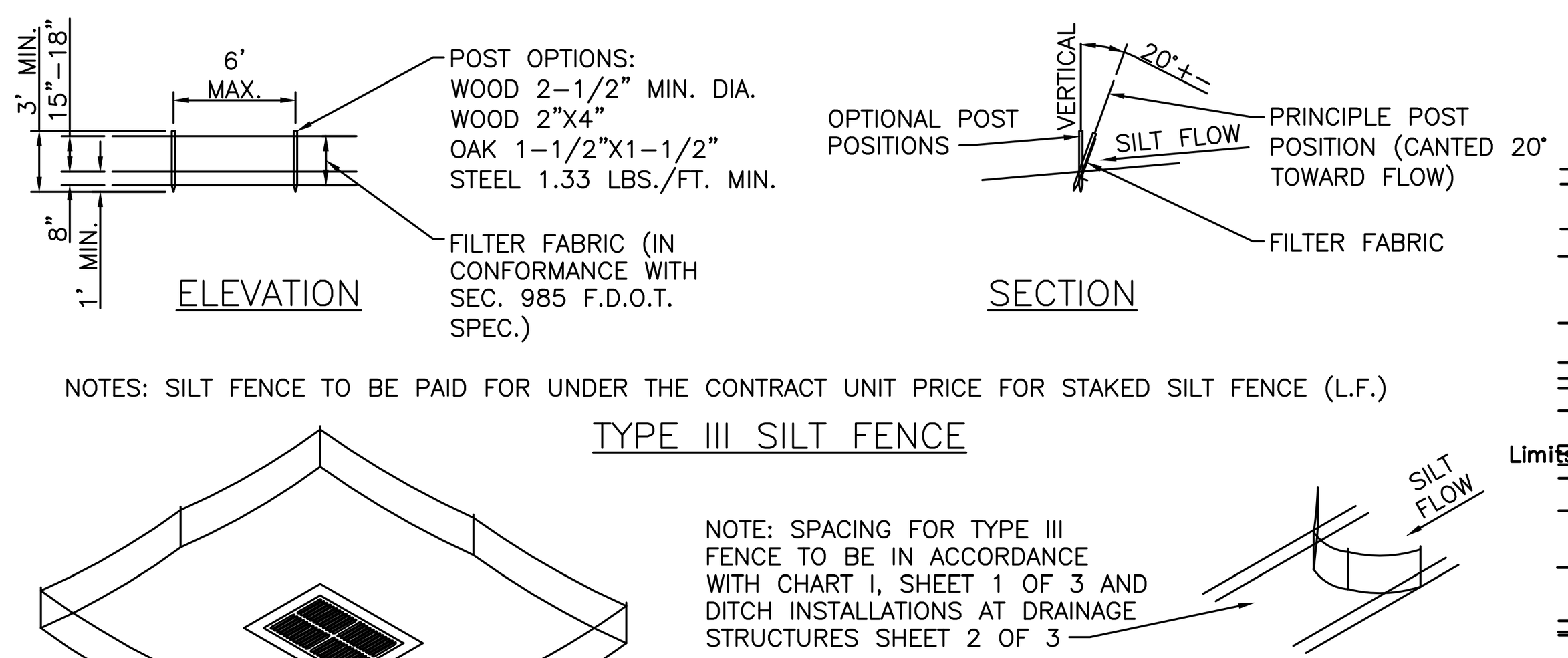
INLET PALMS

ENGINEER CERTIFICATION
☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
☐ JODAH B. BITTLE FL. REG. NO. 57396
☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

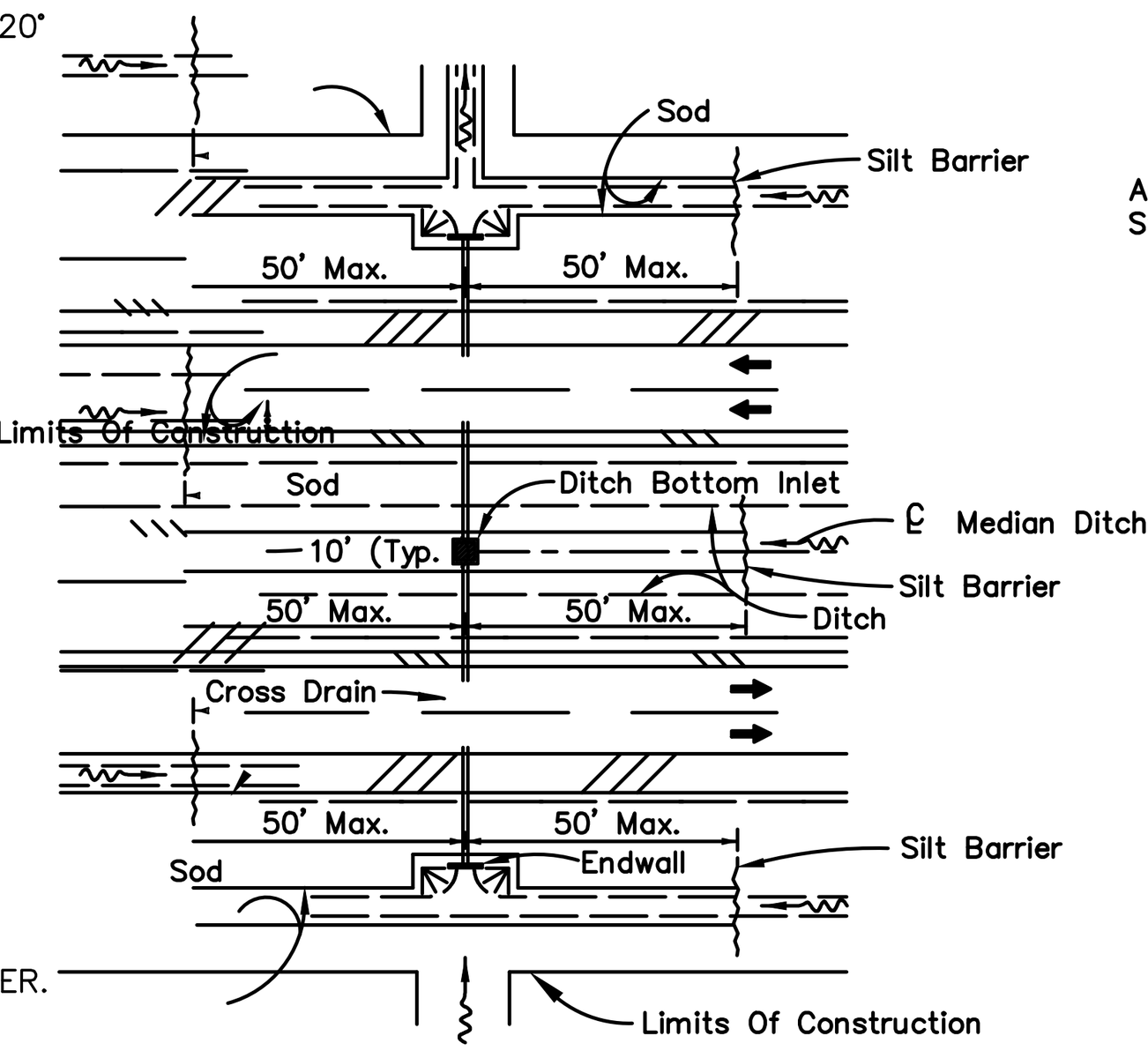
SHEET 2

PROJECT NO. 15-053

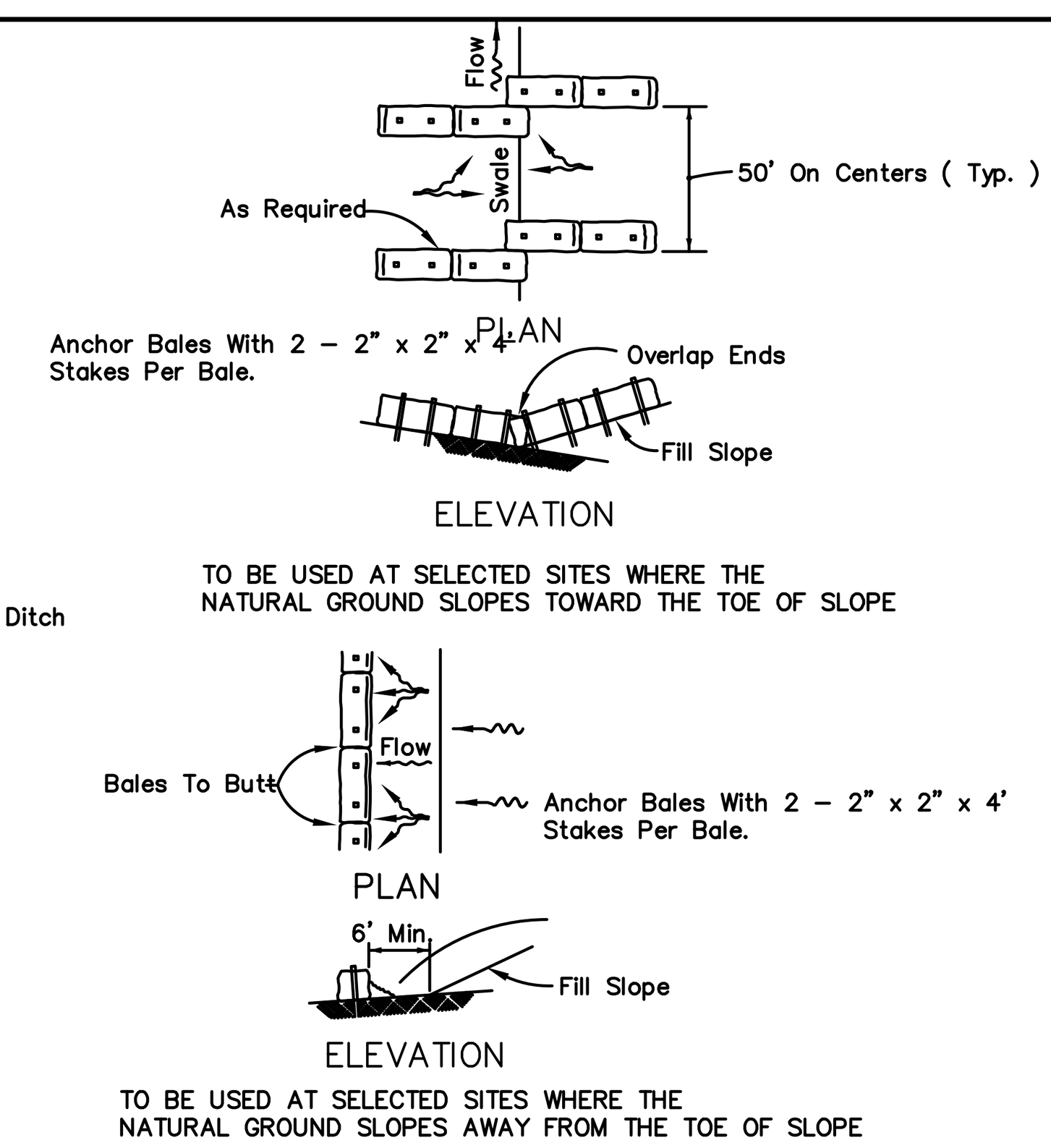


DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES.
SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE APPLICATIONS–N.T.S.



DITCH INSTALLATIONS AT DRAINAGE STRUCTURES

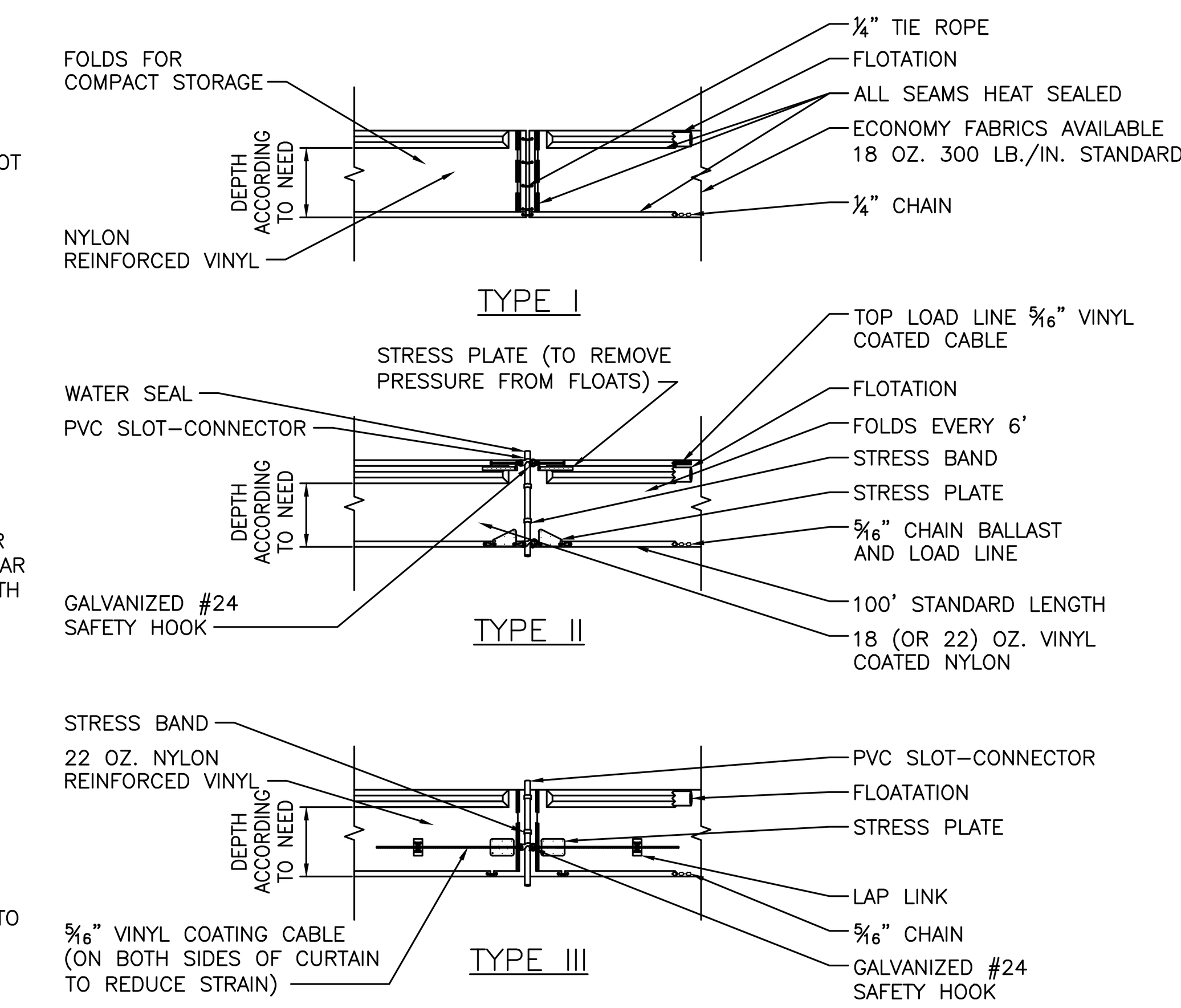


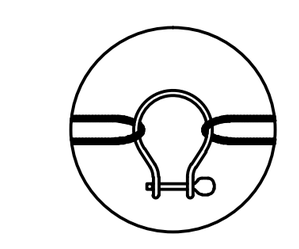
BARRIERS FOR FILL SLOPES

TYPE I. DOT FOR WATERS WITH LOW CURRENTS (NO MORE THAN ONE FOOT PER SECOND) AND LIGHT WINDS: LAKES, PONDS, SMALL STREAMS, MARSHES. FLEXIBLE TOP FLOTATION SECTION WITH ENCAPSULATED EPS FOAM FLOTATION LOGS (6"X6"X4')

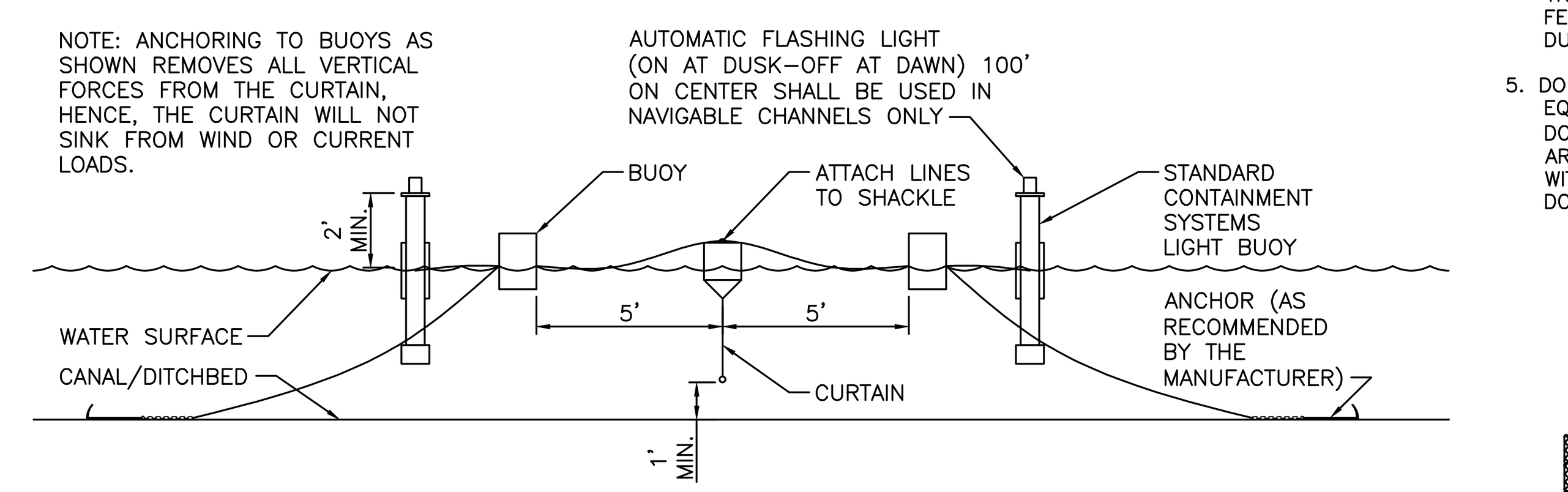
TYPE 2. DOT FOR HIGHER CURRENT WATERS (UP TO FIVE FEET PER SECOND): DEEPER LAKES, STREAMS, INTERCOASTAL AND TIDAL AREAS. INCLUDES AN ENCAPSULATED STEEL LOAD CABLE ALONG TOP OF BARRIER AND 8"X8"X4' FLOTATION LOGS. WEAR STRESS POINTS ARE REINFORCED WITH SHIELDS.

TYPE 3. DOT IS SIMILAR TO TYPE 2. DOT EXCEPT THAT POLYPROPYLENE FILTER FABRIC IS PERMANENTLY INSERTED INTO THE BARRIER SKIRT TO MEET SOME STATE'S SPECIFICATIONS.

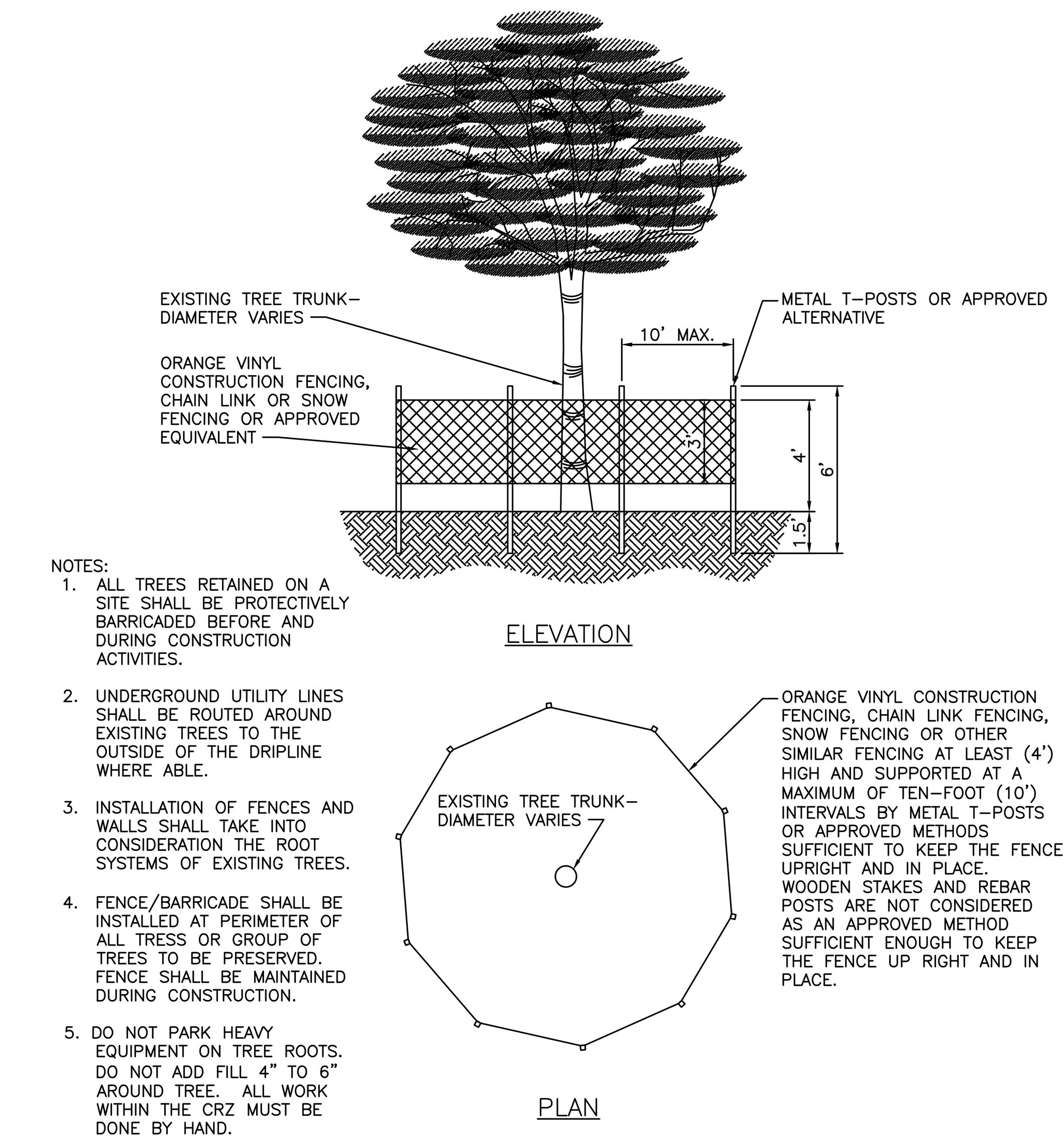




BLOW–UP OF SHACKLE CONNECTION



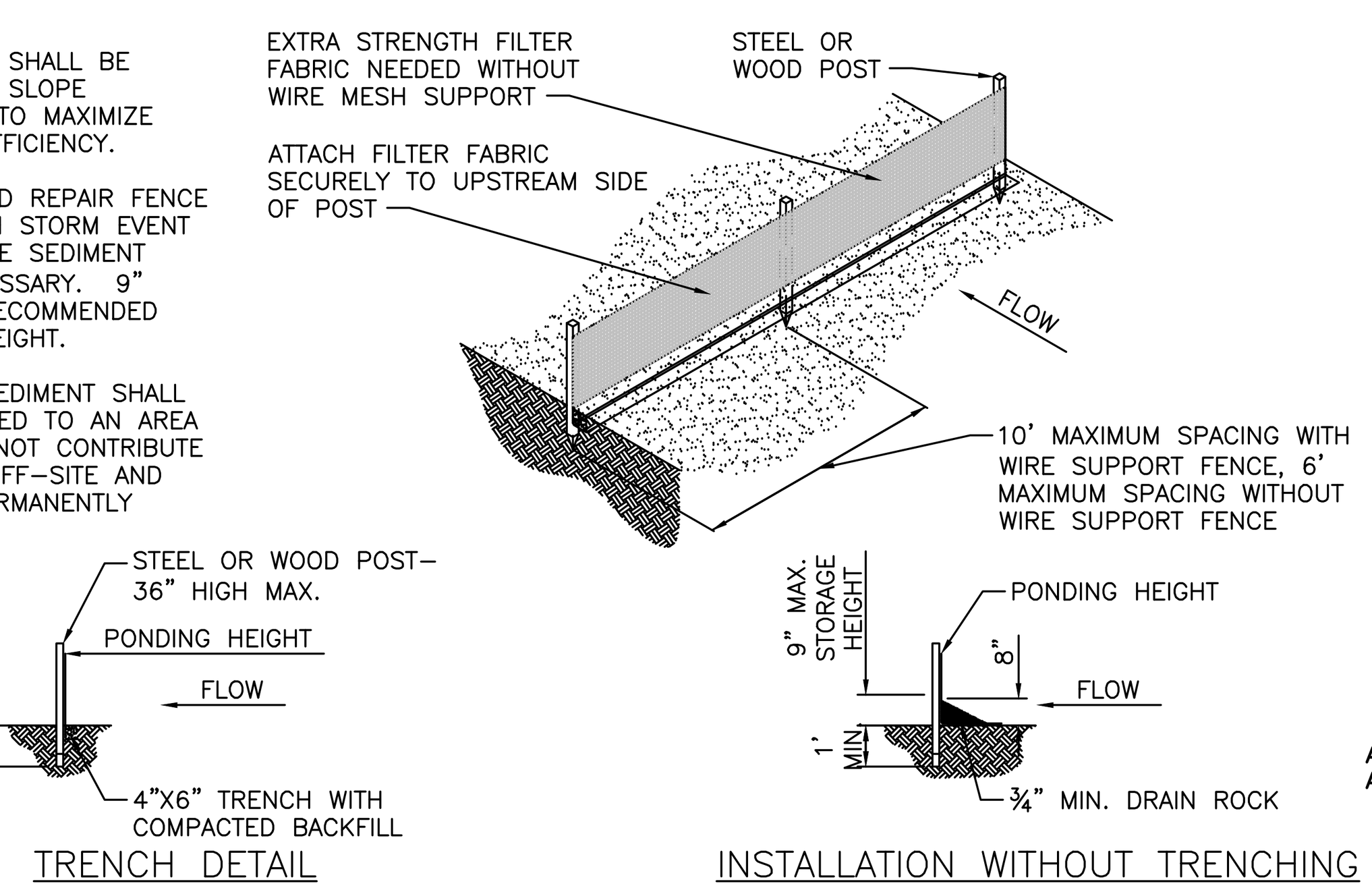
ORIENTATION WHEN INSTALLED (TIDAL SITUATION–TYPE III)–N.T.S.



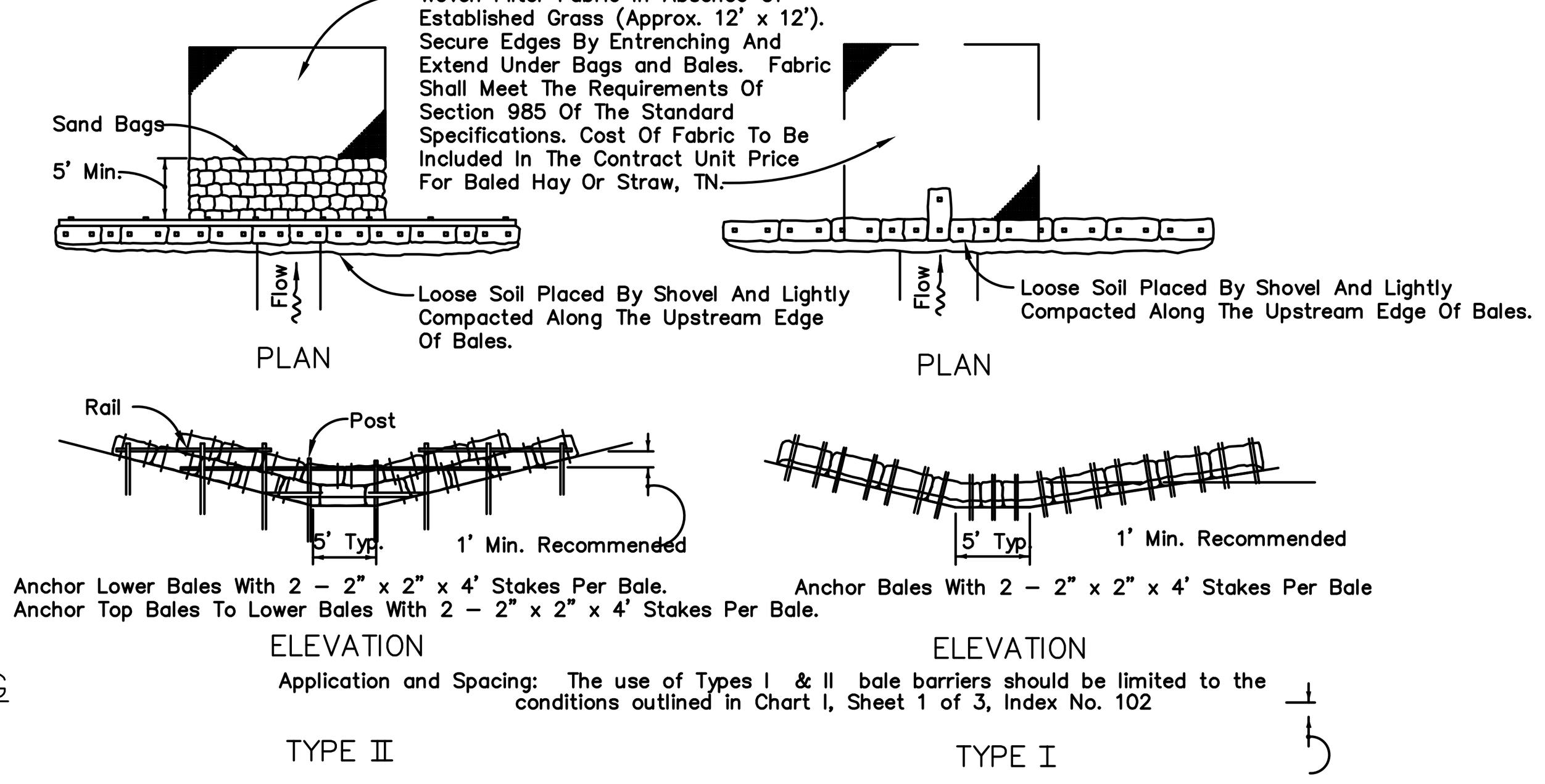
NOTES:
1. ALL TREES RETAINED ON A SITE SHALL BE PROTECTIVELY BARRICADED BEFORE AND DURING CONSTRUCTION ACTIVITIES.
2. UNDERGROUND UTILITY LINES SHALL BE ROUTED AROUND EXISTING TREES TO THE OUTSIDE OF THE DRIPLINE WHERE ABLE.
3. INSTALLATION OF FENCES AND WALLS SHALL TAKE INTO CONSIDERATION THE ROOT SYSTEMS OF EXISTING TREES.
4. FENCE/BARRICADE SHALL BE INSTALLED AT PERIMETER OF ALL TRESS OR GROUP OF TREES TO BE PRESERVED. FENCE SHALL BE MAINTAINED DURING CONSTRUCTION.
5. DO NOT PARK HEAVY EQUIPMENT ON TREE ROOTS. DO NOT ADD FILL 4" TO 6" AROUND TREE. ALL WORK WITHIN THE CRZ MUST BE DONE BY HAND.

PROTECTIVE FENCING FOR TREES–N.T.S.

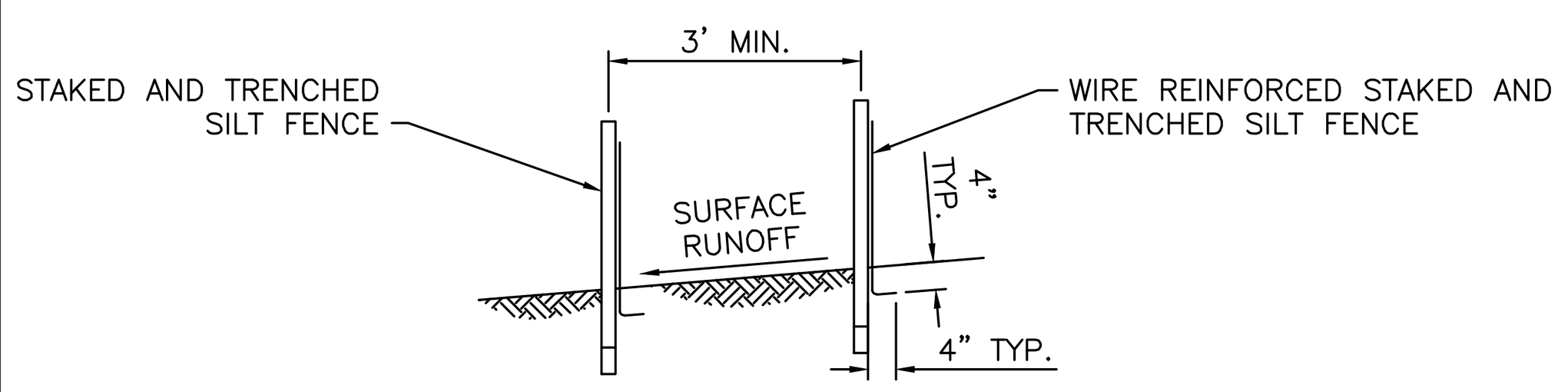
NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF–SITE AND CAN BE PERMANENTLY STABILIZED.



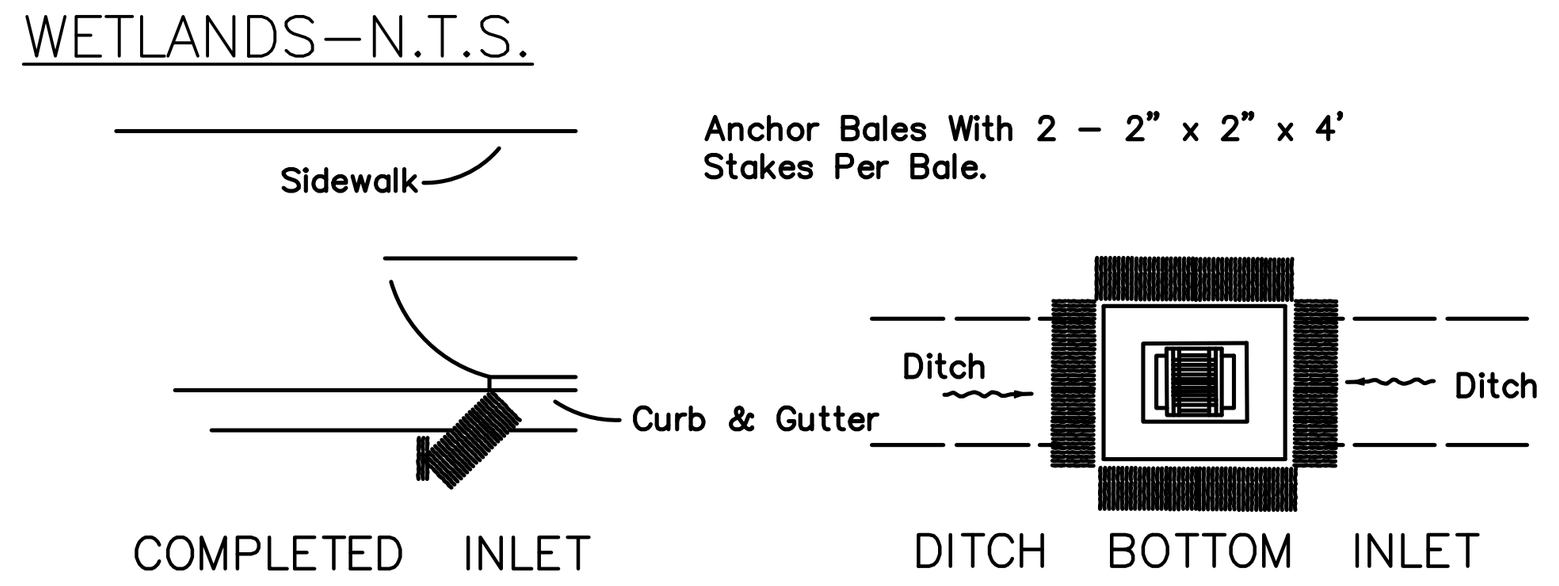
TYPE IV SILT FENCE–N.T.S.



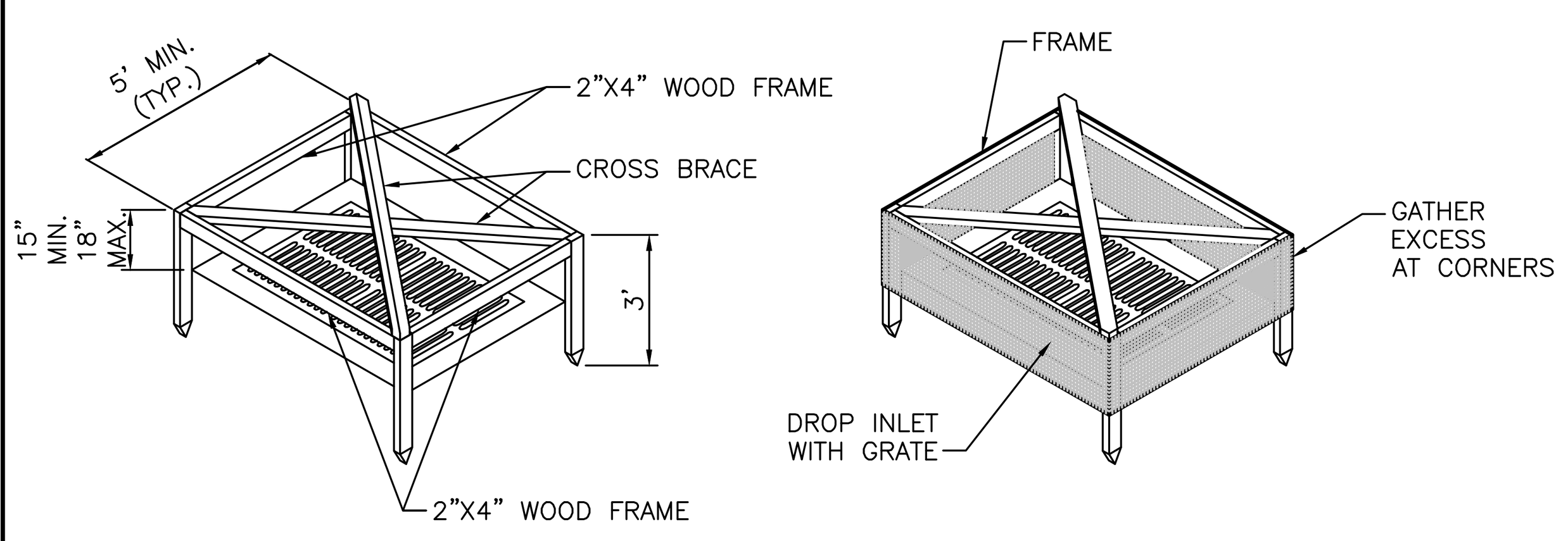
BARRIER FOR UNPAVED DITCHES

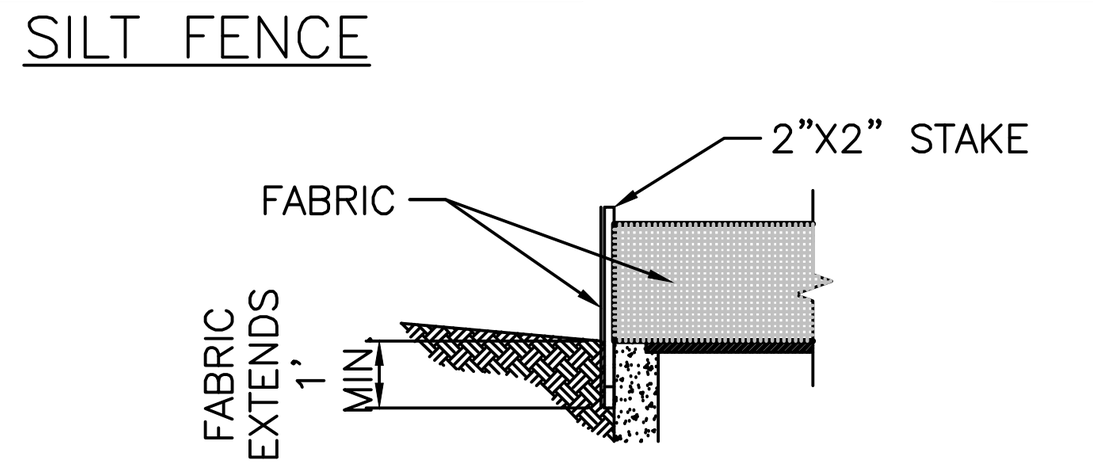


DOUBLE ROW STAKED SILT FENCE FOR USE AROUND WETLANDS–N.T.S.

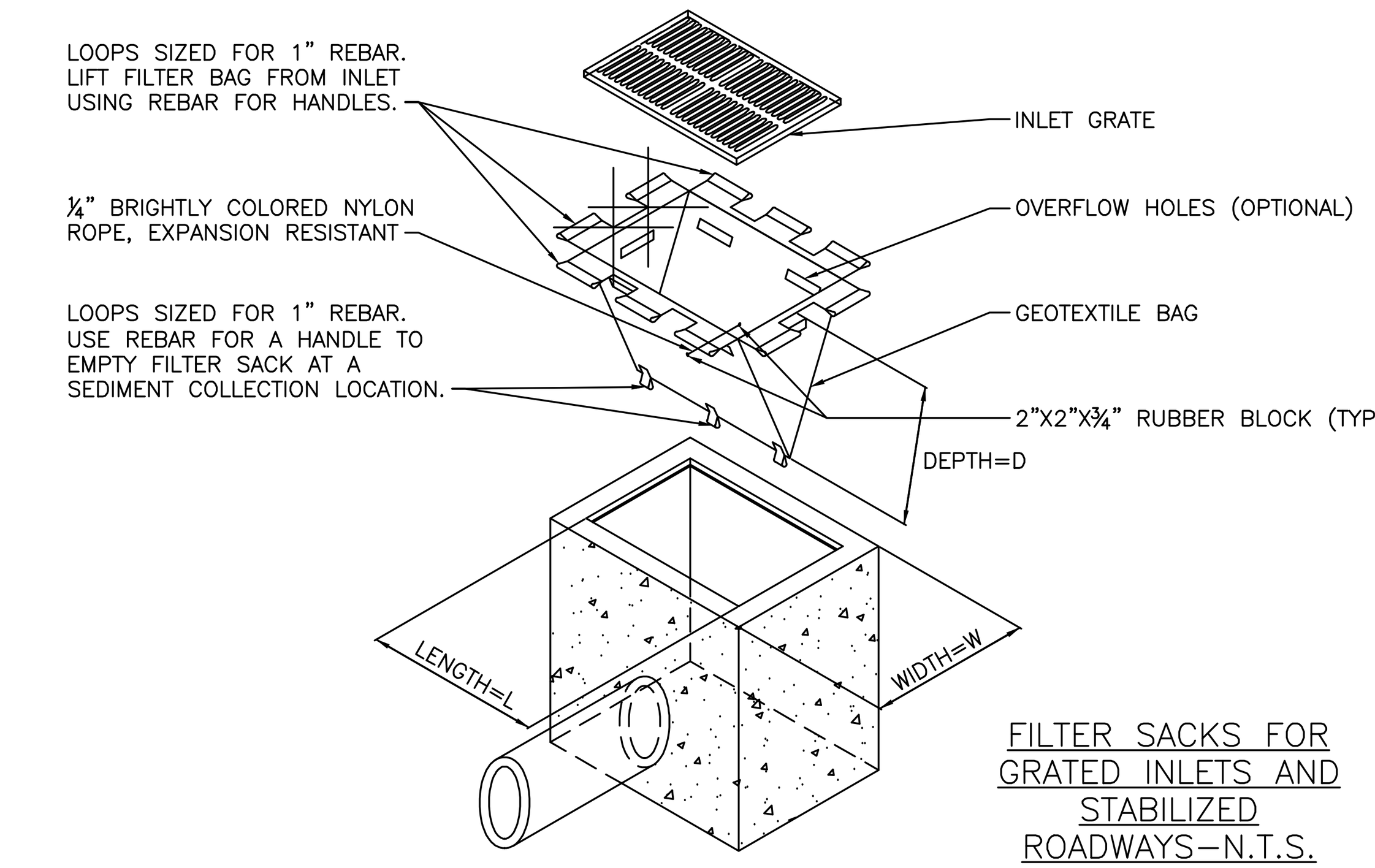


PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

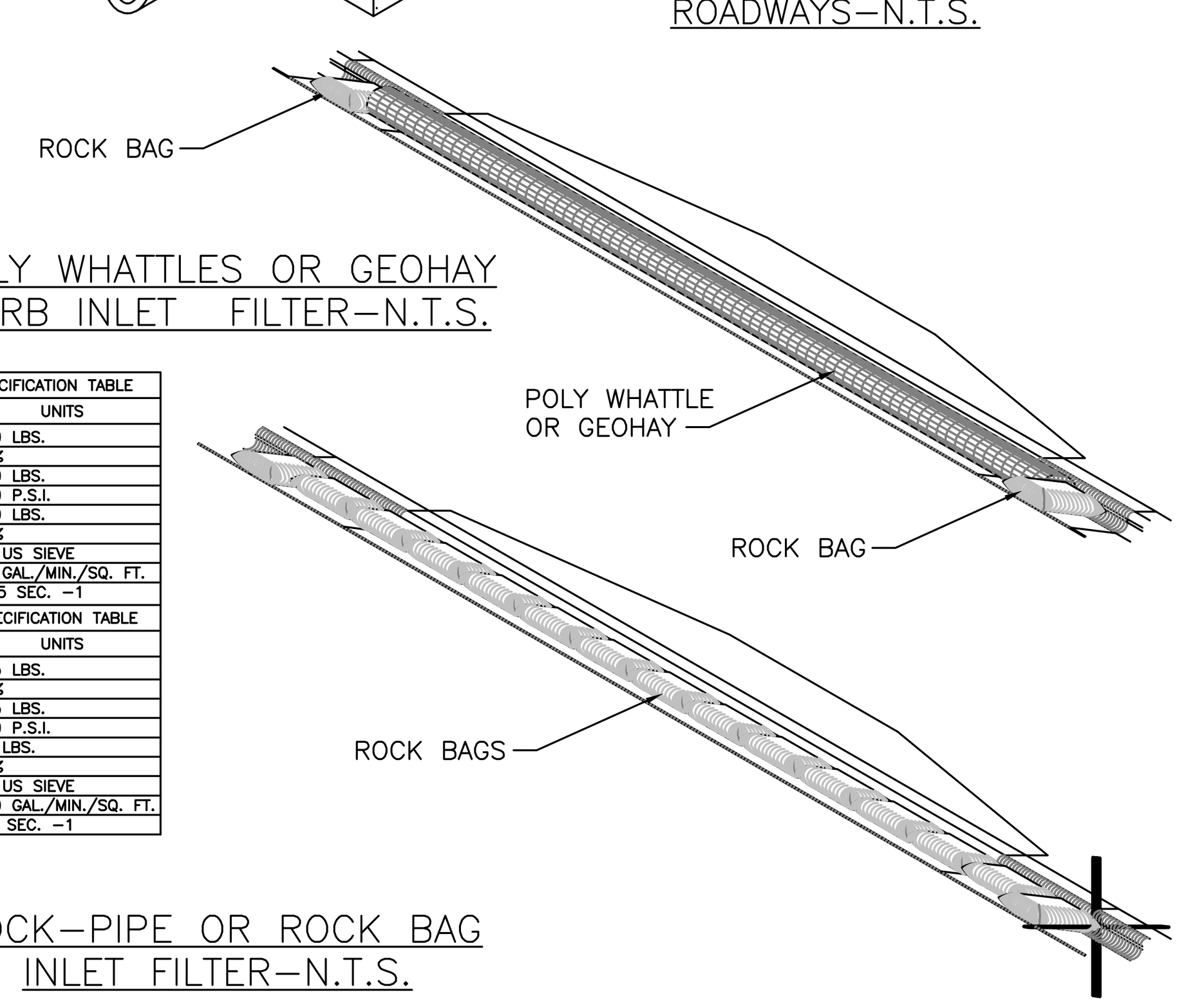




SILT FENCE INLET PROTECTION–N.T.S.



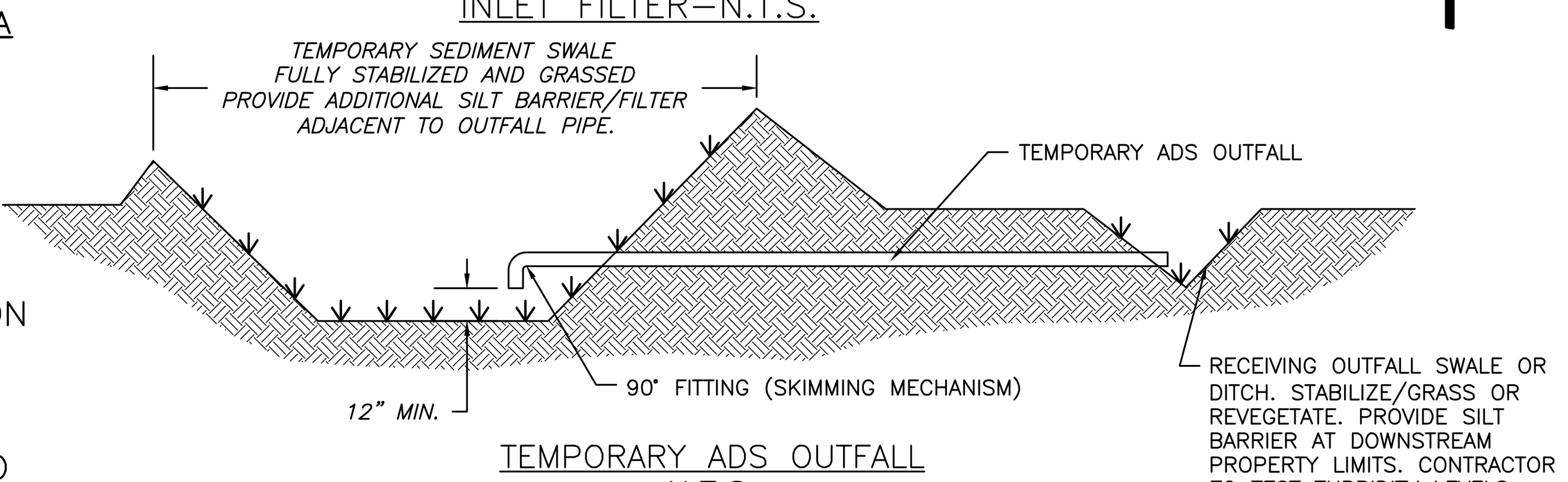
FILTER SACKS FOR GRATED INLETS AND STABILIZED ROADWAYS–N.T.S.



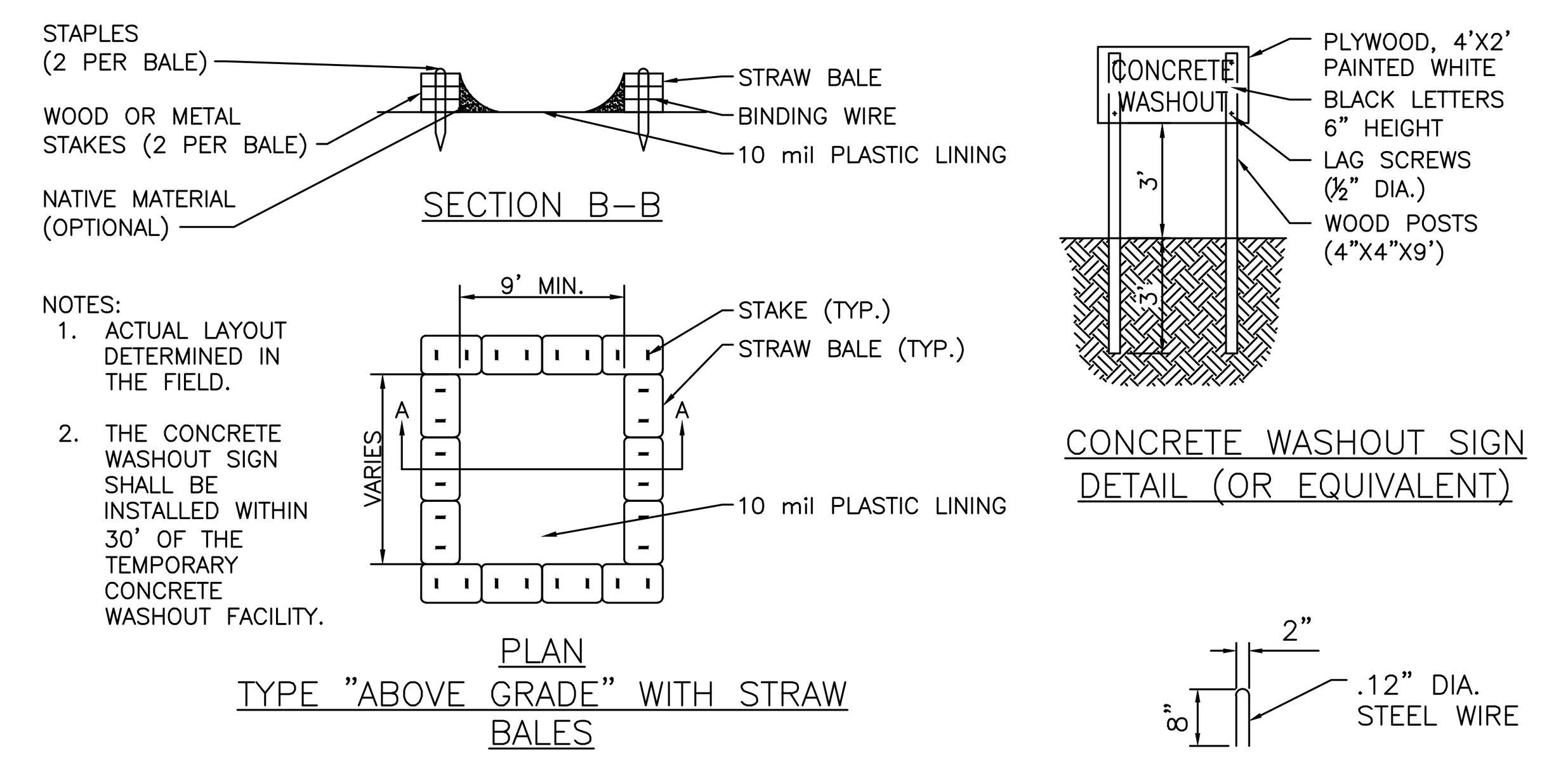
POLY WHATTLES OR GEOHAY CURB INLET FILTER–N.T.S.

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	300 LBS.
GRAB TENSILE ELONGATION	ASTM D–4632	20%
PUNCTURE	ASTM D–4833	120 LBS.
MULLEN BURST	ASTM D–3786	800 P.S.I.
TRAPEZOID TEAR	ASTM D–4533	120 LBS.
UV RESISTANCE	ASTM D–4355	80%
APPARENT OPENING SIZE	ASTM D–4751	40 US SIEVE
FLOW RATE	ASTM D–4491	40 GAL./MIN./SQ. FT.
PERMITTIVITY	ASTM D–4491	0.55 SEC. –1
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	265 LBS.
GRAB TENSILE ELONGATION	ASTM D–4632	20%
PUNCTURE	ASTM D–4833	135 LBS.
MULLEN BURST	ASTM D–3786	420 P.S.I.
TRAPEZOID TEAR	ASTM D–4533	45 LBS.
UV RESISTANCE	ASTM D–4355	90%
APPARENT OPENING SIZE	ASTM D–4751	20 US SIEVE
FLOW RATE	ASTM D–4491	200 GAL./MIN./SQ. FT.
PERMITTIVITY	ASTM D–4491	1.5 SEC. –1

SOCK–PIPE OR ROCK BAG INLET FILTER–N.T.S.

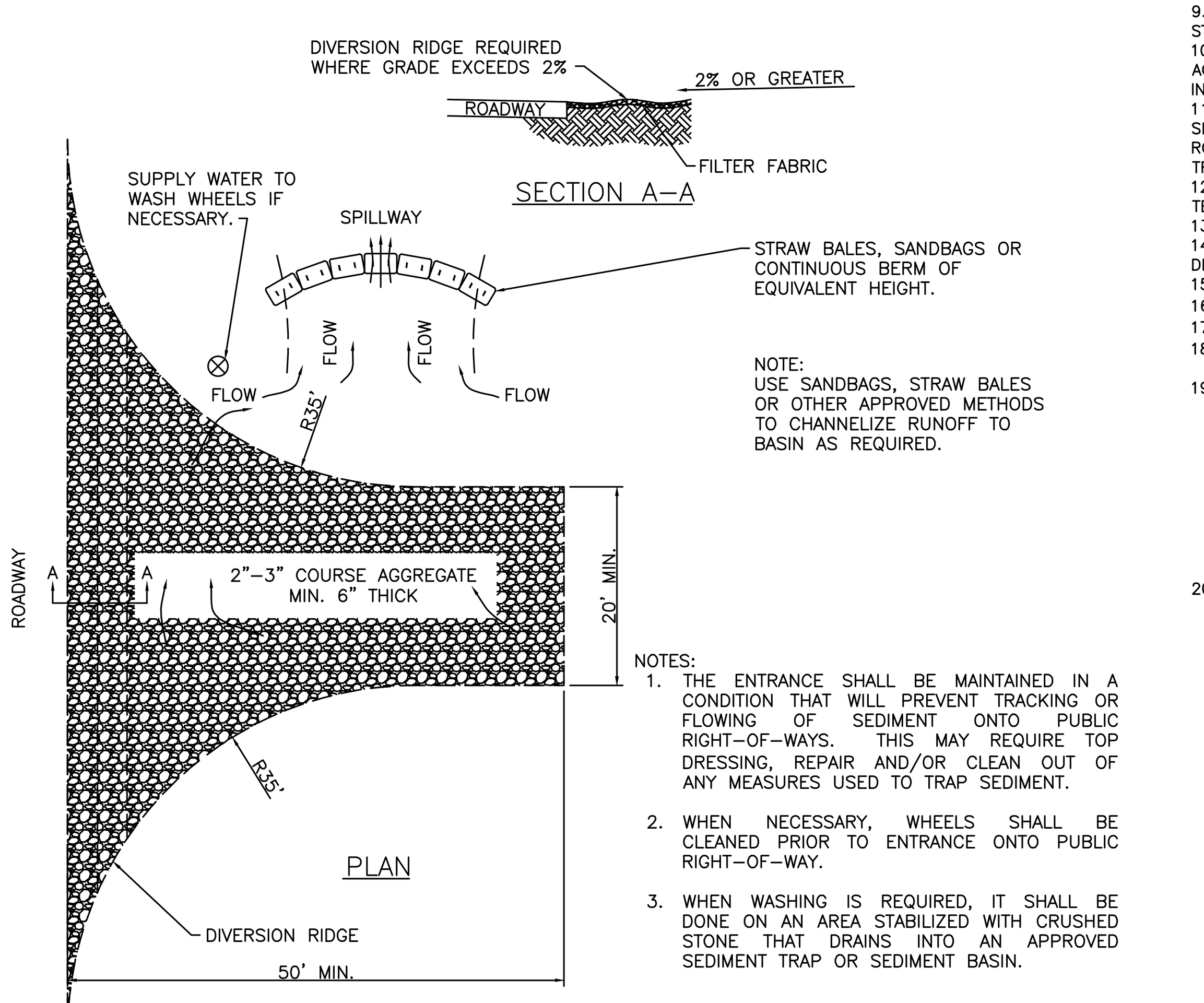


TEMPORARY ADS OUTFALL
N.T.S.



NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

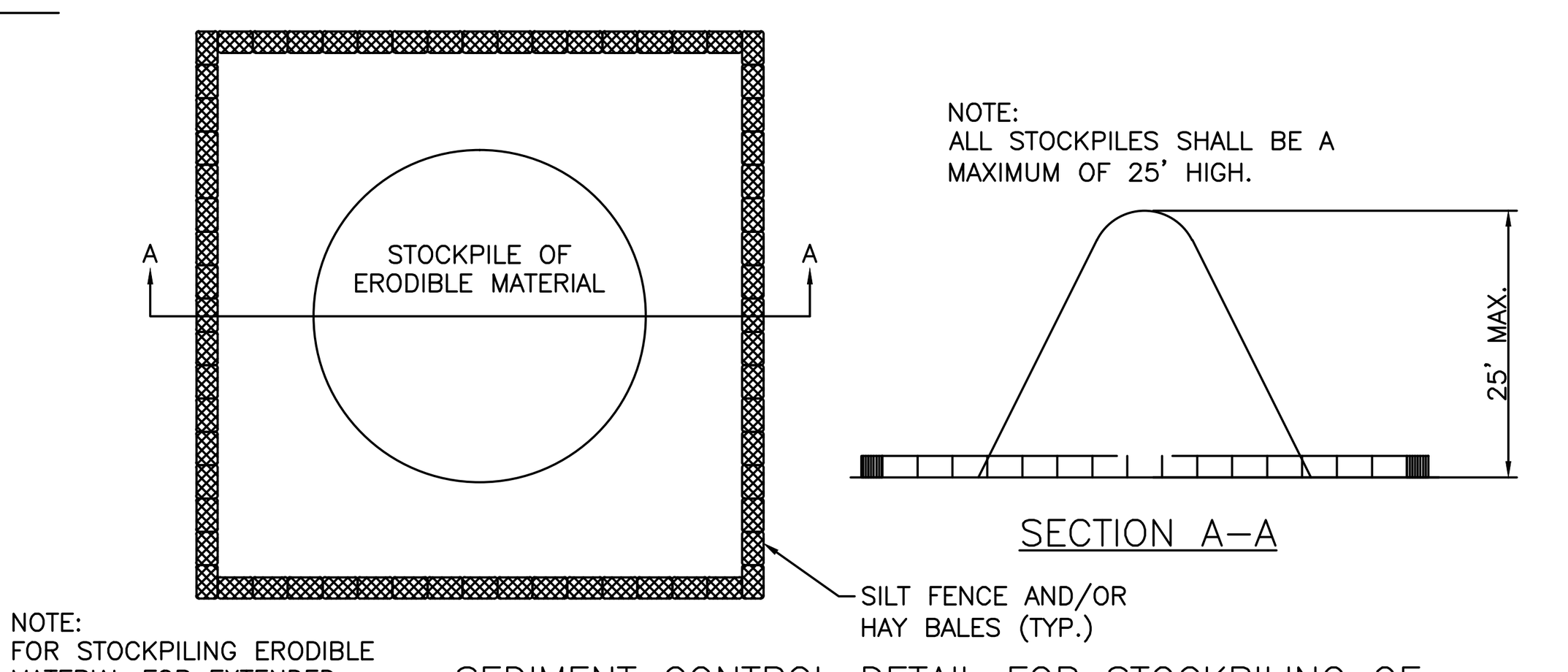
CONCRETE & STUCCO WASTE MANAGEMENT–N.T.S.



NOTE:
USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.

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

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT–N.T.S.



NOTE:
FOR STOCKPILING ERODIBLE MATERIAL FOR EXTENDED PERIODS, THE AREA SHALL BE SEEDED AND MULCHED.

SEDIMENT CONTROL DETAIL FOR STOCKPILING OF ERODIBLE MATERIAL–N.T.S.

– All turbidity, erosion, and sedimentation controls shall be in accordance with 'Best Management Practices' as described in the Florida Land Development Manual: A Guide to Sound Land and Water Management.
– Reference F.D.O.T. Index #102.

EROSION CONTROL DETAILS

N.T.S.

NOTES:
WETLAND PROTECTION PLAN
a. SILT FENCE MUST BE INSTALLED BY HAND ALONG SURVEYED CONSERVATION EASEMENT BOUNDARIES (AT TOE OF SLOPE–SEE SECTIONS EE,N,O) PRIOR TO CONSTRUCTION.
b. NO TURBID DISCHARGE TO WETLANDS IS PERMITTED.
c. ALL STOCKPILE AND/OR CONSTRUCTION STAGING AREAS MUST BE LOCATED 100 FT. FROM WETLANDS.

EROSION CONTROL AND DEWATERING NOTES

1. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND–DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED.
6. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
7. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
8. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAIN SYSTEM, DITCH, OR CHANNEL. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT–LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
9. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION.
10. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
11. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
13. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND EROSION.
14. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN INDEX NOS. 101, 102, AND 103 OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, AND THE DETAILS AND NOTES ON THE PLANS.
15. CONTRACTOR RESPONSIBLE FOR ALL SURFACE WATER DISCHARGES – RAINFALL RUN–OFF OR DEWATERING ACTIVITIES.
16. CONTRACTOR MUST INCORPORATE ALL BMP'S NECESSARY TO MEET OR EXCEED STATE WATER QUALITY REQUIREMENTS.
17. THIS POLLUTION PREVENTION PLAN IS A MINIMUM GUIDELINE ONLY. ADDITIONAL BMP'S MAY BE NECESSARY AT CONTRACTORS EXPENSE.
18. NO TURBID DISCHARGE. TURBIDITY READINGS ARE REQUIRED ONCE A WEEK (BY THE CONTRACTOR) AND MUST BE REPORTED TO THE PROJECT ENGINEER. LOCATION SHALL BE DETERMINED BY THE ENGINEER.
19. DEWATERING ACTIVITIES:
   A – DISCHARGE MUST NOT EXCEED STATE WATER QUALITY STANDARDS.
   B – CONTRACTOR MUST HAVE A TRANSFERABLE SJRWMD CONSUMPTIVE USE PERMIT KNOWN AS A "NOTICED GENERAL PERMIT FOR SHORT TERM CONSTRUCTION DE–WATERING", UNLESS DE–WATERING ACTIVITIES WILL RESULT IN LESS THAN 300,000 GPD FOR 30 DAYS OR LESS.
   C – NO HYDRAULIC PUMPS MAY BE USED FOR DE–WATERING UNLESS APPROVED BY THE WATER MANAGEMENT DISTRICT FOR THAT AREA. DEWATERING EXISTING STORMWATER RETENTION AREAS (PONDS/LAKES) MAY BE EXEMPT FROM THIS CONDITION. CONTRACTOR TO CONFIRM WITH SJRWMD.
   D – NO TURBID DISCHARGE. TURBIDITY READINGS ARE REQUIRED ONCE A WEEK AND MUST BE REPORTED TO THE PROJECT ENGINEER.
20. THE CONTRACTOR SHALL OBTAIN GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON–CONTAMINATED SITE ACTIVITY.
   A. BEFORE DISCHARGE OF PRODUCED GROUND WATER CAN OCCUR FROM THE SITE, ANALYTICAL TESTS ON SAMPLES OF THE PROPOSED UNTREATED DISCHARGE WATER SHALL BE PERFORMED TO DETERMINE IF CONTAMINATION EXISTS BY CONTRACTOR). IF NONE EXISTS, THE RESULTS SHALL BE SUBMITTED TO THE FDEP INDUSTRIAL WASTEWATER PERMITTING WITHIN ONE WEEK OF COMMENCEMENT OF DISCHARGE (C.O. ALI KAZI, P.E., 3319 MAGUIRE BLVD. SUITE 232, ORLANDO, FL, 32803), WITH A LETTER NOTIFYING THE AGENCY THAT DEWATERING ACTIVITIES WILL COMMENCE PURSUANT TO 62–621.300(2) F.A.C. AND THE SITE QUALIFIES FOR THE GENERIC PERMIT.
   B. THE FACILITY IS AUTHORIZED TO DISCHARGE PRODUCED GROUND WATER FROM ANY NON–CONTAMINATED SITE ACTIVITY WHICH DISCHARGES BY A POINT SOURCE TO SURFACE WATERS OF THE STATE, AS DEFINED IN CHAPTER62–620, F.A.C., ONLY IF THE REPORTED VALUES FOR THE PARAMETERS LISTED IN TABLE 1 DO NOT EXCEED ANY OF THE LISTED SCREEING VALUES.
   C. MINIMUM REPORTING REQUIREMENTS FOR ALL PRODUCED GROUND WATER DISCHARGERS. THE EFFLUENT SHALL BE SAMPLED (BY CONTRACTOR) BEFORE THE COMMENCEMENT OF DISCHARGE, AGAIN WITHIN THIRTY (30)DAYS AFTER COMMENCEMENT OF DISCHARGE, AND THEN ONCE EVERY SIX (6)MONTHS FOR THE LIFE OF THE PROJECT TO MAINTAIN CONTINUED COVERAGE UNDER THIS GENERIC PERMIT.SAMPLES TAKEN IN COMPLIANCE WITH THE PROVISIONS OF THIS PERMIT SHALL BE TAKEN PRIOR TO ACTUAL DISCHARGE OR MIXING WITH THE RECEIVING WATERS. THE EFFLUENT SHALL BE SAMPLED FOR THE PARAMETERS LISTED ON TABLE 1.
   D. IF ANY OF THE ANALYTICAL TEST RESULTS EXCEED THE SCREENING VALUES LISTED IN TABLE 1, EXCEPT TOC, THE DISCHARGE IS NOT AUTHORIZED BY THIS PERMIT. IF T.O.C. IS EXCEEDED BECAUSE OF NATURALLY OCCURING ORGANIC COMPOUNDS, THE RESULT AND EXPLANATION FOR THE HIGH READING MUST BE SUBMITTED TO THE FDEP FOR REVIEW AND ISSUANCE OF AN EXEMPTION.
   E. IF ANY SCREENING VALUES (OTHER THAN TOC) EXCEED THE THRESHOLDS, THEN A GENERIC PERMIT CANNNOT BE ISSUED, AND A SEPERATE INDIVIDUAL WASTERWATER PERMIT APPLICATION MUST BE SUBMITTED AT LEAST 90 DAYS PRIOR TO DATE OF DISCHARGE. THE ENGINEER OF RECORD MUST BE NOTIFIED IF THIS OCCURS.

	SCREENING VALUES FOR DISCHARGE INTO:	
Parameter	Fresh Waters	Coastal Waters
Total Organic Carbon (TOC)	10.0 mg/L	10.0 mg/L
pH, standard units	6.0–8.5	6.5–8.5
Total Recoverable Mercury	0.012 μg/L	0.025 μg/L
Total Recoverable Cadmium	9.3 μg/L	9.3 μg/L
Total Recoverable Copper	2.9 μg/L	2.9 μg/L
Total Recoverable Lead	0.03 mg/L	5.6 mg/L
Total Recoverable Zinc	86.0 μg/L	86.0 μg/L
Total Recoverable Chromium (Hex.)	11.0 μg/L	50.0 μg/L
Benzene	1.0 μg/L	1.0 μg/L
Naphthalene	100.0 μg/L	100.0 μg/L

MARK	REVISION	DATE
1	REVISED PER COFP	5/29/15

DRAWING 15–053
DESIGNED J.B.B.
DRAWN J.B.B.
CHECKED J.B.B.
SCALE NTS
DATE 4/15/15

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SCHULKE, BITTLE & STODDARD, L.L.C.
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STORMWATER POLLUTION PREVENTION DETAILS

INLET PALMS

ENGINEER CERTIFICATION
☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
☐ JODAH B. BITTLE FL. REG. NO. 57396
☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET 3

PROJECT NO. 15–053

KELLER, SCHLEICHER & MacWILLIAM ENGINEERING AND TESTING, INC.
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P.O. BOX 78-1377, SEBASTIAN, FL 32978-1377
www.ksmengineering.net
E-Mail: KSM@KSMENGINEERING.NET

April 21, 2015

Joseph Foglia
Foglia Construction
622 Beachland Blvd.,
Vero Beach, FL. 32963

Re: The Inlet Palms
1502 Seaway Drive
Fort Pierce, Florida
KSM Project #: 150817-b

Dear Mr. Foglia:

As requested, KSM Engineering & Testing has performed a subsurface investigation at the above referenced site. The data gathered during the investigation, together with our geotechnical related opinions, are included in this report.

A. Site Description:

The site is located on the Fort Pierce Inlet at 1502 Seaway Drive, Fort Pierce, Florida. At the time of drilling, the waterfront site was cleared and fairly flat with no major vegetation.

B. Project Description:

It is our understanding that seven (7) townhomes are planned for the site. Although our office was not provided with detailed structural loads, for our geotechnical analysis, we have assumed the maximum wall loading for the 3-story structures will be about 7,000 pounds per linear foot along the wall foundation and less than 150 kips for any individual column loads.

Site grading for the new structure will include approximately several feet of structural fill to reach the desired grades.

C. The scope of our study consisted of the following:

1. Performed Standard Penetration Test Borings in the proposed construction area to estimate the subsoil relative density.
2. Measured the groundwater level at each boring.
3. Evaluated the existing soil conditions with respect to the proposed construction and provided recommendations for site preparation and foundation design.
4. Prepared this report to document our findings.

D. Site Investigation:

The site investigation program consisted of performing a total of six (6) Standard Penetration test borings in the proposed construction area. The borings were terminated at depths of 40 to 60 feet below existing grade. The locations of the borings are shown on the attached boring Location Plan.

The SPT borings were completed in accordance with procedures described in ASTM D-1586. A standard 1.5 inch I.D., 2 inch O.D. split-spoon sampler is driven into the soil by successive blows of a 140 pound hammer freely falling 30 inches. The number of blows required to drive the sampler 1 foot, after seating 6 in., is designated the Penetration Resistance, or "N" value. At regular intervals the sampler is extracted from the ground and opened to allow visual examination and classification of the retained soil sample. Also, the groundwater table was allowed to stabilize and the depth of the groundwater elevation recorded from existing grade.

The records of the soils encountered, the penetration resistances and groundwater level are shown on the attached logs.

E. Engineering Evaluation and Conclusions:

Based on the information obtained from this site investigation we are pleased to offer the following evaluation:

The boring logs indicate there are soft soil layers located on the site including organic material. The soft and organic layers were encountered about 4 feet to 8 feet below grade. Another soft layer of gray clay and sand was found in two (2) of the soils borings at a depth of approximately 13 feet below existing grade. This layer is approximately 2 to 4 feet thick.

In order for a shallow foundation to perform satisfactorily, it must be able to support the structural loads with an acceptable factor of safety against excessive settlements; both total and differential. Due to the settlement potential of the soft/organics soil layers found on the site, we do not recommend supporting the proposed structures on conventional shallow footings. The anticipated settlement, in our opinion, would be too excessive and beyond the general accepted safe limits for the structure.

In order to avoid any damaging structural distress due to settlements, and based on past experience of other projects that had similar underlying subsurface conditions, we recommend the installation of a concrete pile supported foundation system. The concrete piles will carry the structural loads below the weak soil layers. We recommend using auger cast-in-place piles. Although we have not been furnished with estimated structural loads, we assume that the following capacities will be sufficient to support the intended loading.

Pile Diameter (Inches)	Pile Capacity (Kips)	Pile Depth (Feet)	Allowable Uplift (kips)	Lateral Load (kips)
14	36	25	20	5
14	45	30	28	5
14	75	37	40	5

All Piles should be installed and inspected in accordance to the recommendation published by the Auger Cast-In-Place Pile Committee of the Deep Foundation Institute.

F. Site Preparation:

The proposed building area, plus a minimum margin of five feet beyond the proposed building limits shall be stripped and grubbed of surface debris, including vegetation, roots and organic matter and proofrolled. Sufficient passes should be made during compaction operations to produce a density no less than 95 percent of its modified dry Proctor value to a depth of two feet.

After the exposed surface has been proofrolled, the building and pavement areas may be filled to the desired grades. The fill material shall consist of clean granular sand containing less than 10% material passing the U.S. Standard No. 200 mesh sieve. Place structural fill in loose layers of 12 inches in thickness and compact each lift to at least 95 percent of its modified dry Proctor value.

We recommend field density tests and on-site inspection be performed at appropriate times during the earth work operations in order to verify that the site preparations have been properly constructed.

G. Swimming Pools:

The pool shell and pool deck can also be supported on a pile foundation system.

An alternative would be to over-excavate the pool site completely removing the soft organic material from 4 feet to 8 feet and replace it with 3/4 stones. Compact the 3/4" stone with a "jumping jack" compactor in 12 inch lifts so the subgrade below the pool is firm and stable. Call for an inspection to verify that the site has been properly prepared prior to placing the pool shell reinforcing.

Backfill material behind the pool shell shall consist of clean granular sand with less than 10 percent "fines" passing the U.S. No. 200 sieve. Place backfill material in loose lifts of 12 inches in thickness and compact each lift to no less than 95 percent of its modified dry Proctor value (ASTM D 1557).

H. Closure:

This report has been prepared in accordance with generally accepted soil and foundation engineering practices based on the results of the test borings and the assumed loading conditions. This report does not reflect any variations which may occur between the borings. If variations appear evident during the course of construction, it would be necessary to re-evaluate the recommendations of this project.

We are pleased to be of assistance to you on this phase of your project. When we may be of further service to you or should you have any questions, please feel free to call.

JULIE E. KELLER — STATE OF FLORIDA — No. 68366 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

Email To: 3323267@aol.com; wstoddard@sbsengineers.com

BORING NUMBER B-1
PAGE 1 OF 2

KSM Engineering & Testing
P.O. Box 78-1377
Sebastian, FL 32978
Tel: (772)-589-0712
Fax: (772)-589-6469

CLIENT Foglia Construction — PROJECT NAME The Inlet Palms
PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida
DATE STARTED 4/18/15 — COMPLETED 4/19/15 — GROUND ELEVATION — HOLE SIZE inches
DRILLING CONTRACTOR — GROUND WATER LEVELS:
DRILLING METHOD — ☑ AT TIME OF DRILLING 4.00 ft
LOGGED BY OGD — CHECKED BY JEK — AT END OF DRILLING —
NOTES See Attached Location Plan — AFTER DRILLING —

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
0		Brown Sand and Shell	SS		7-8-8 (16)				
		Gray Sand and Shell	SS		6-7-7 (14)				
5		Sand and Organics	SS		3-2-2 (4)				
		Organics	SS		0-0-2 (2)				
		Gray Sand and Shell	SS		4-4-7 (11)				
10			SS		4-3-3 (6)				
15			SS		14-22-13 (35)				
20		Gray Sand with Rock and Shell	SS		11-7-8 (15)				
25		Gray Clay and Shell	SS		2-3-3 (6)				
30		Gray Sand and Shell	SS		11-18-22 (40)				

(Continued Next Page)

BORING NUMBER B-1
PAGE 2 OF 2

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PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
35		Gray Sand and Shell (continued)							
40			SS		9-11-16 (27)				

Bottom of borehole at 40.0 feet.

BORING NUMBER B-2
PAGE 1 OF 2

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PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida
DATE STARTED 4/18/15 — COMPLETED 4/19/15 — GROUND ELEVATION — HOLE SIZE inches
DRILLING CONTRACTOR — GROUND WATER LEVELS:
DRILLING METHOD — ☑ AT TIME OF DRILLING 3.00 ft
LOGGED BY OGD — CHECKED BY JEK — AT END OF DRILLING —
NOTES See Attached Location Plan — AFTER DRILLING —

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
0		Brown Sand	SS		8-9-11 (20)				
		Brown Sand with Shell	SS		6-6-6 (12)				
5		Gray Sand with Organics	SS		2-2-1 (3)				
		Organics	SS		0-0-3 (3)				
		Gray Sand with Shell	SS		4-4-7 (11)				
15		Gray Clay and Sand	SS		2-1-1 (2)				
		Gray Sand with Shell	SS		14-13-9 (22)				
25			SS		6-4-6 (10)				
30			SS		3-2-2 (4)				
35			SS		10-10-16 (26)				

(Continued Next Page)

BORING NUMBER B-2
PAGE 2 OF 2

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CLIENT Foglia Construction — PROJECT NAME The Inlet Palms
PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
35		Gray Sand with Shell (continued)							
40			SS		10-11-12 (23)				
45			SS		6-8-10 (18)				
50			SS		6-8-8 (16)				
55			SS		8-11-11 (22)				
60			SS		14-11-16 (27)				

Bottom of borehole at 60.0 feet.

BORING NUMBER B-3
PAGE 1 OF 2

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CLIENT Foglia Construction — PROJECT NAME The Inlet Palms
PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida
DATE STARTED 4/18/15 — COMPLETED 4/19/15 — GROUND ELEVATION — HOLE SIZE inches
DRILLING CONTRACTOR — GROUND WATER LEVELS:
DRILLING METHOD — ☑ AT TIME OF DRILLING 3.50 ft
LOGGED BY OGD — CHECKED BY JEK — AT END OF DRILLING —
NOTES See Attached Location Plan — AFTER DRILLING —

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
0		Brown Sand	SS		6-7-7 (14)				
		Gray Sand with Shell	SS		6-6-6 (12)				
5		Organics	SS		2-1-1 (2)				
		Gray Sand with Shell	SS		0-0-0 (0)				
			SS		6-6-10 (16)				
15			SS		3-3-2 (5)				
20			SS		7-10-14 (24)				
25			SS		8-12-12 (24)				
30			SS		4-3-4 (7)				
35			SS		7-10-14 (24)				

(Continued Next Page)

BORING NUMBER B-3
PAGE 2 OF 2

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DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
35		Gray Sand with Shell (continued)							
40			SS		8-8-7 (15)				

Bottom of borehole at 40.0 feet.

BORING NUMBER B-4
PAGE 1 OF 2

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PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida
DATE STARTED 4/18/15 — COMPLETED 4/19/15 — GROUND ELEVATION — HOLE SIZE inches
DRILLING CONTRACTOR — GROUND WATER LEVELS:
DRILLING METHOD — ☑ AT TIME OF DRILLING 3.00 ft
LOGGED BY OGD — CHECKED BY JEK — AT END OF DRILLING —
NOTES See Attached Location Plan — AFTER DRILLING —

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
0		Brown Sand	SS		8-8-14 (22)				
		Brown Sand with Shell	SS		8-7-7 (14)				
5		Organics	SS		3-2-1 (3)				
		Gray Sand with Shell	SS		0-0-0 (0)				
			SS		8-11-14 (25)				
15			SS		3-2-2 (4)				
20			SS		8-14-18 (32)				
25			SS		7-7-6 (13)				
30			SS		1-1-4 (5)				
35			SS		9-9-13 (22)				

(Continued Next Page)

BORING NUMBER B-4
PAGE 2 OF 2

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CLIENT Foglia Construction — PROJECT NAME The Inlet Palms
PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
35		Gray Sand with Shell (continued)							
40			SS		10-10-12 (22)				

Bottom of borehole at 40.0 feet.

BORING NUMBER B-5
PAGE 1 OF 2

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PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida
DATE STARTED 4/18/15 — COMPLETED 4/19/15 — GROUND ELEVATION — HOLE SIZE inches
DRILLING CONTRACTOR — GROUND WATER LEVELS:
DRILLING METHOD — ☑ AT TIME OF DRILLING 3.00 ft
LOGGED BY OGD — CHECKED BY JEK — AT END OF DRILLING —
NOTES See Attached Location Plan — AFTER DRILLING —

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
0		Brown Sand	SS		6-6-6 (12)				
		Brown Sand with Shell	SS		11-13-14 (26)				
5		Organics	SS		2-1-1 (2)				
			SS		0-0-0 (0)				
		Gray Sand with Shell	SS		3-3-7 (10)				
15			SS		1-1-1 (2)				
20			SS		10-13-14 (27)				
25			SS		13-8-12 (21)				
30		Gray Sand with Clay and Shell	SS		1-3-6 (9)				
35		Gray Sand with Shell	SS		13-15-12 (27)				

(Continued Next Page)

BORING NUMBER B-5
PAGE 2 OF 2

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CLIENT Foglia Construction — PROJECT NAME The Inlet Palms
PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
35		Gray Sand with Shell (continued)							
40			SS		11-10-8 (18)				
45			SS		7-8-13 (21)				
50			SS		3-5-5 (10)				
55			SS		4-4-7 (11)				
60			SS		4-4-10 (14)				

Bottom of borehole at 60.0 feet.

BORING NUMBER B-6
PAGE 1 OF 2

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DRILLING CONTRACTOR — GROUND WATER LEVELS:
DRILLING METHOD — ☑ AT TIME OF DRILLING 3.00 ft
LOGGED BY OGD — CHECKED BY JEK — AT END OF DRILLING —
NOTES See Attached Location Plan — AFTER DRILLING —

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
0		Brown Sand with Shell	SS		6-8-11 (20)				
			SS		4-4-6 (9)				
5		Organics	SS		1-1-1 (2)				
			SS		0-0-0 (0)				
10		Gray Fine Sand	SS		5-5-10 (15)				
15		Gray Clay and Shell	SS		1-2-2 (4)				
20		Gray Sand with Shell	SS		13-17-13 (30)				
25			SS		5-11-9 (20)				
30		Gray Clay and Shell	SS		1-3-7 (10)				
35		Gray Sand with Shell	SS		7-14-12 (26)				

(Continued Next Page)

BORING NUMBER B-6
PAGE 2 OF 2

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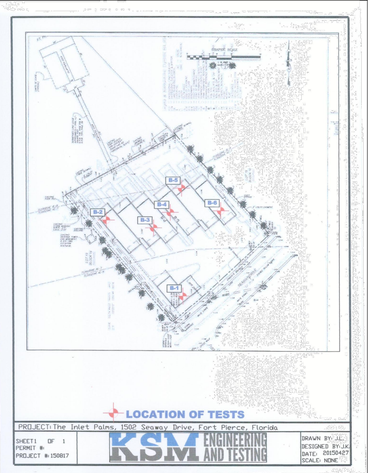
CLIENT Foglia Construction — PROJECT NAME The Inlet Palms
PROJECT NUMBER KSM # 150817-b — PROJECT LOCATION 1502 Seaway Drive, Fort Pierce, Florida

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	% RECOVERY (ROD)	BLOWS ON CASING (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲	□ FINES CONTENT (%) □
35		Gray Sand with Shell (continued)							
40			SS		13-10-13 (23)				

Bottom of borehole at 40.0 feet.



SCHULKE, BITTLE & STODDARD, L.L.C.
CIVIL & STRUCTURAL ENGINEERING · LAND PLANNING · ENVIRONMENTAL PERMITTING
CERTIFICATION OF AUTHORIZATION NO.: 00008688
1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com

DATE	MARK	
5/29/15	1	REVISED PER COFP

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DRAWING	15-053
DESIGNED	J.B.B.
DRAWN	J.B.B.
CHECKED	J.B.B.
SCALE	N.T.S.
DATE	4/15/15

SOIL BORINGS

INLET PALMS

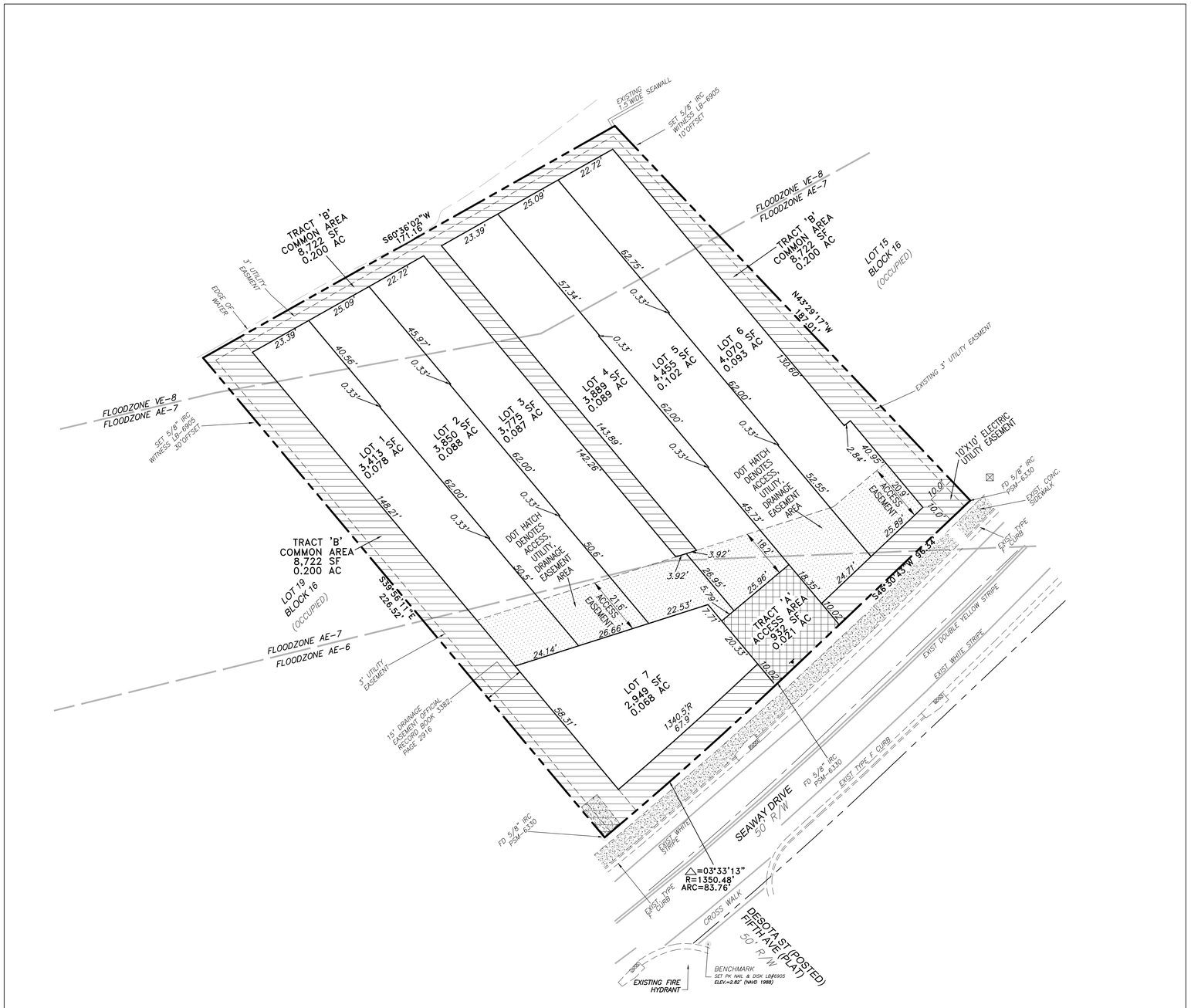
ENGINEER CERTIFICATION
☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
☐ JOAH B. BITTLE FL. REG. NO. 57396
☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET 4

PROJECT NO. 15-053

INLET PALMS PLANNED DEVELOPMENT PRELIMINARY PLAT
SECTION 01, TOWNSHIP 35 S, RANGE 40 E - CITY OF FT PIERCE, FLORIDA



LEGEND

EX SAN / SAN	EXISTING / PROPOSED SANITARY SEWERLINE
	EXISTING DRAINAGE PIPE
	PROPOSED DRAINAGE PIPE
EX WM / WAT	EXISTING / PROPOSED WATER MAIN
SF	FILTER FENCE/SEDIMENT BARRIER
	EXISTING WOOD FENCE
	PROPOSED FENCE
24.45	PROPOSED SPOT ELEVATION AT EOP/SIDEWALK
25.0	PROPOSED GRADE / CONTOUR
	PROPOSED DRAINAGE FLOW DIRECTION
9.0'R	PROPOSED EOP RADIUS
PROPANE	1,000 GAL UNDERGROUND PROPANE TANK
	24" ADS YARD DRAIN
	STORMTECH DRAIN
	PROPOSED WALL
	TRENCH DRAIN
	STREET LIGHT
	MODIFIED TYPE 'C' INLET
Ⓟ	JUNCTION MANHOLE
DS-1	DRAINAGE STRUCTURE LABEL
	FIRE HYDRANT
	PROPOSED SIGN
Ⓢ	SEWER MANHOLE

Legend & Abbreviations: (symbols not scaleable for size)

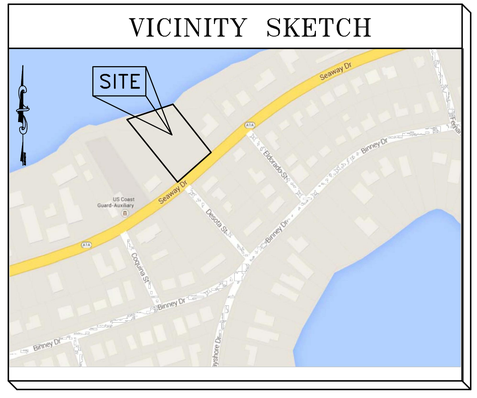
PLS	PROFESSIONAL LAND SURVEYOR	(P)	PLAT	23.5	PROPOSED GRADE
PSM	PROFESSIONAL SURVEYOR & MAPPER	(C)	CALCULATED	NAVD	NORTH AMERICAN VERTICAL DATUM
LB	LAND SURVEYING BUSINESS		TRAFFIC CONTROL BOX	x23.5	TYPICAL ELEVATION
℄	CENTERLINE		GUY WIRE	A/C	AIR CONDITIONER
R	RADIUS		WOOD UTILITY POLE	CONC.	CONCRETE
L	LENGTH		TELEPHONE SERVICE	F.F.	FINISH FLOOR
Δ	DELTA ANGLE		CABLE T.V. BOX	BSB	BUILDING SETBACK LINE
E/P	EDGE OF PAVEMENT		ELECTRIC BOX	EL./ELEV.	ELEVATION
B/C	BACK OF CURB		LIGHT POST	R/W	RIGHT OF WAY
B.M.	BENCHMARK		WELL	AB	AS-BUILT
POC	POINT OF COMMENCEMENT		HYDRANT	P/K	PARKER-KALON
POB	POINT OF BEGINNING		GATE VALVE		
o	(PCP) PERMANENT CONTROL POINT		IRRIGATION VALVE		
PCP	PERMANENT CONTROL POINT		WATER METER		
⊠	(PRM) PERMANENT REFERENCE MONUMENT		SANITARY MANHOLE		
PRM	PERMANENT REFERENCE MONUMENT		SANITARY SERVICE		
O	(IP) IRON PIPE		SEPTIC TANK		
IP	IRON PIPE		DRAINAGE MANHOLE		
◉	(IRC) IRON ROD & CAP		CURB INLET		
IRC	IRON ROD & CAP		SURFACE INLET		
□	(CM) CONCRETE MONUMENT		MITERED END SECTION		
CM	CONCRETE MONUMENT		CONCEPTUAL DRAINAGE		
FD	FOUND		STREET SIGN		
(M)	MEASURED				

OWNER	BELMONT AVE PROPERTY, LLC 2277 N. CIRCLE DRIVE PALATINE, IL 60067-0000
DEVELOPER	FOGLIA CUSTOM HOMES 1555 INDIAN RIVER BLVD, UNIT B141 VERO BEACH, FL 32960
ENGINEER	SCHULKE, BITTLE & STODDARD, L.L.C. JODAH B. BITTLE, P.E. 57396 1717 INDIAN RIVER BLVD. SUITE 201 VERO BEACH, FL. 32960 (772) 770-9622
SURVEYOR:	MERIDIAN LAND SURVEYORS CHARLES BLANCHARD, PSM #5755 1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FL 32960 PH. (772) 794-1213

NOTES

1. ALL DISTURBED AREAS IN THE RIGHT-OF-WAY SHALL BE SODDED. SEED AND MULCH IS NOT ACCEPTABLE.
2. ANY DAMAGE TO THE EXISTING INFRASTRUCTURE, INCLUDING SIDEWALKS, BY THE CONTRACTOR MUST BE REPLACED PRIOR TO FINAL INSPECTION. SIDEWALK PATCHING IS NOT ACCEPTABLE.
3. CURB RAMPS MUST MEET THE REQUIREMENTS OF FDOT STANDARD INDEX 304.
4. ALL STRIPING WITHIN THE RIGHT-OF-WAY SHALL BE THERMOPLASTIC.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING PUBLIC ROADWAY, CURBS, GUTTERS, SIDEWALKS, DRAINAGE SYSTEMS AND UTILITIES AS A DIRECT RESULT OF NEW CONSTRUCTION. ROAD IMPROVEMENTS SUCH AS BUT NOT LIMITED TO RESURFACING MAYBE REQUIRED.
6. THE SITE DRAINAGE AND CONSTRUCTION IMPROVEMENTS SHALL NOT ADVERSELY IMPACT ADJOINING PROPERTIES AND/OR ROADWAYS.
7. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT SUNSHINE STATE ONE CALL SYSTEM AT 1-800-432-4770 FOR LOCATIONS OF THIS EQUIPMENT AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION.
8. ANY CONFLICTS WITH THE PLANS AND EXISTING UTILITIES, DRAINAGE, ETC TO BE REPORTED TO ENGINEER FOR RESOLUTION OF ISSUES.
9. CONTRACTOR TO FIELD VERIFY ALL REPORTED INVERTS AND UTILITIES AND REPORT TO ENGINEER.
10. PROPANE TANKS TO BE UNDERGROUND.

VICINITY SKETCH



HATCH LEGEND

- COMMON AREA TRACT 'B'
- ACCESS TRACT 'A'
- ACCESS EASEMENT OVER LOTS 1 TO 6

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MARK	REVISION	DATE
1	REVISED PER COFP	5/29/15

DRAWING	15-053
DESIGNED	J.B.B.
DRAWN	J.B.B.
CHECKED	J.B.B.
SCALE	1:20
DATE	4/15/2015

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SCHULKE, BITTLE & STODDARD, L.L.C.
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PRELIMINARY PLAT

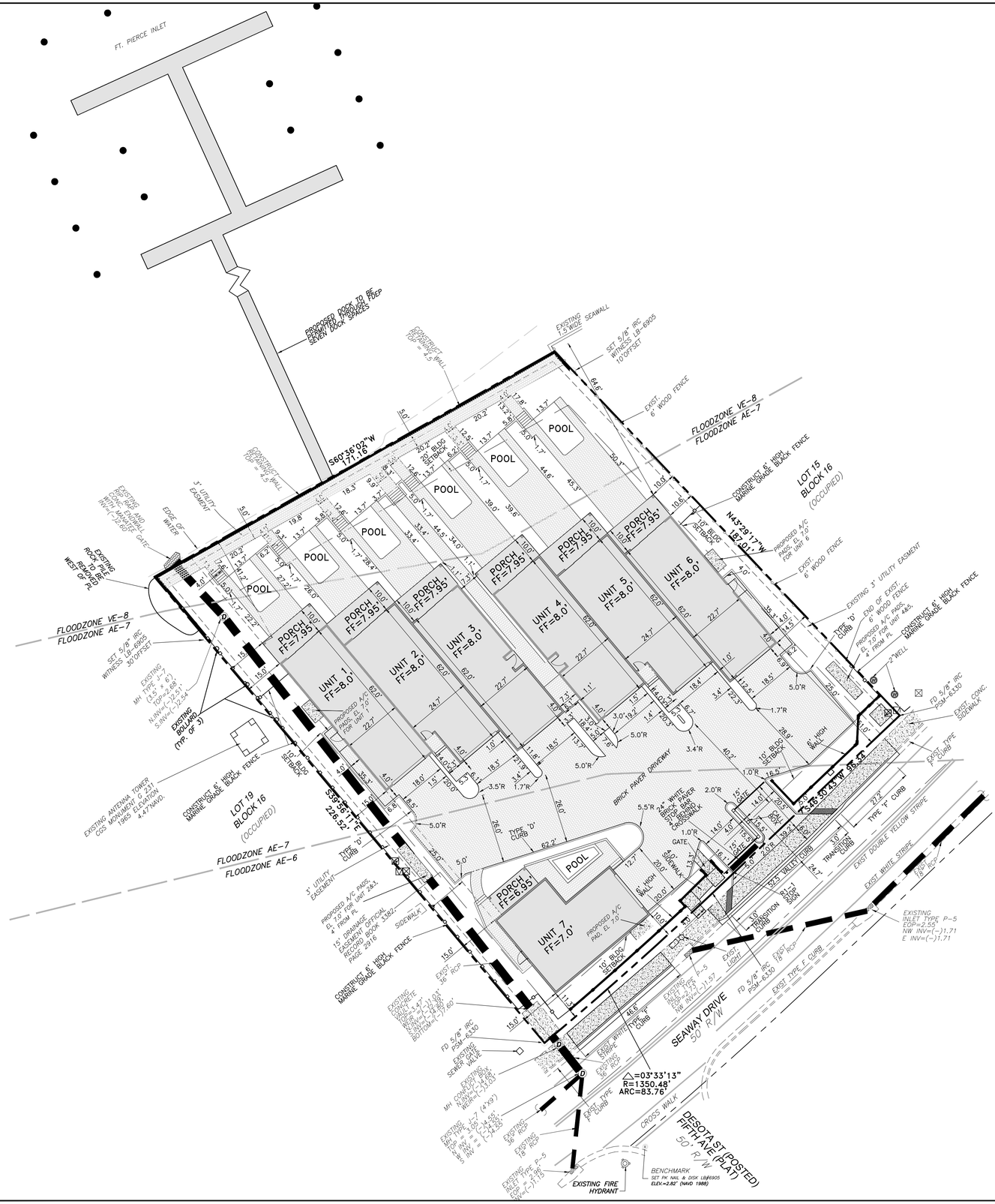
INLET PALMS

ENGINEER CERTIFICATION
- ☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
- ☐ JODAH B. BITTLE FL. REG. NO. 57396
- ☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET 5

PROJECT NO. 15-053



LEGEND

EX SAN — EX SAN	EXISTING SANITARY SEWERLINE
SAN — SAN	PROPOSED SANITARY SEWERLINE
	EXISTING DRAINAGE PIPE
	PROPOSED DRAINAGE PIPE
EX WM — EX WM	EXISTING WATER MAIN
WAT — WAT	PROPOSED WATER MAIN
SF — SF — SF	FILTER FENCE/SEDIMENT BARRIER
	EXISTING WOOD FENCE
	PROPOSED FENCE
24.45	PROPOSED SPOT ELEVATION AT EOP/SIDEWALK
25.0	PROPOSED GRADE / CONTOUR
	PROPOSED DRAINAGE FLOW DIRECTION
9.0'R	PROPOSED EOP RADIUS
PROPANE	1,000 GAL UNDERGROUND PROPANE TANK
	24" ADS YARD DRAIN
	STORMTECH DRAIN
	PROPOSED WALL
	TRENCH DRAIN
	STREET LIGHT
	MODIFIED TYPE 'C' INLET
	JUNCTION MANHOLE
DS-1	DRAINAGE STRUCTURE LABEL
	FIRE HYDRANT
	PROPOSED SIGN
S	SEWER MANHOLE

Legend & Abbreviations: (symbols not scaleable for size)

PLS	PROFESSIONAL LAND SURVEYOR	(P)	PLAT	23.5	PROPOSED GRADE
PSM	PROFESSIONAL SURVEYOR & MAPPER	(C)	CALCUATED	NAVD	NORTH AMERICAN VERTICAL DATUM
LB	LAND SURVEYING BUSINESS		TRAFFIC CONTROL BOX	23.5	TYPICAL ELEVATION
℄	CENTERLINE		GUY WIRE	A/C	AIR CONDITIONER
R	RADIUS		WOOD UTILITY POLE	CONC.	CONCRETE
L	LENGTH		TELEPHONE SERVICE	F.F.	FINISH FLOOR
Δ	DELTA ANGLE		CABLE T.V. BOX	BSB	BUILDING SETBACK LINE
E/P	EDGE OF PAVEMENT		ELECTRIC BOX	EL./ELEV.	ELEVATION
B/C	BACK OF CURB		LIGHT POST	R/W	RIGHT OF WAY
B.M.	BENCHMARK		WELL	AB	AS-BUILT
POC	POINT OF COMMENCEMENT		HYDRANT	P/K	PARKER-KALON
POB	POINT OF BEGINNING		GATE VALVE		
○	(PCP) PERMANENT CONTROL POINT		IRRIGATION VALVE		
PCP	PERMANENT CONTROL POINT		WATER METER		
⊠	(PRM) PERMANENT REFERENCE MONUMENT		SANITARY MANHOLE		
PRM	PERMANENT REFERENCE MONUMENT		SANITARY SERVICE		
O	(IP) IRON PIPE		SEPTIC TANK		
IP	IRON PIPE		DRAINAGE MANHOLE		
◉	(IRC) IRON ROD & CAP		CURB INLET		
IRC	IRON ROD & CAP		SURFACE INLET		
□	(CM) CONCRETE MONUMENT		MITERED END SECTION		
CM	CONCRETE MONUMENT		CONCEPTUAL DRAINAGE		
FD	FOUND		STREET SIGN		
(M)	MEASURED				

NOTES

1. ALL DISTURBED AREAS IN THE RIGHT-OF-WAY SHALL BE SODDED. SEED AND MULCH IS NOT ACCEPTABLE.
2. ANY DAMAGE TO THE EXISTING INFRASTRUCTURE, INCLUDING SIDEWALKS, BY THE CONTRACTOR MUST BE REPLACED PRIOR TO FINAL INSPECTION. SIDEWALK PATCHING IS NOT ACCEPTABLE.
3. CURB RAMPS MUST MEET THE REQUIREMENTS OF FDOT STANDARD INDEX 304.
4. ALL STRIPING WITHIN THE RIGHT-OF-WAY SHALL BE THERMOPLASTIC.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING PUBLIC ROADWAY, CURBS, GUTTERS, SIDEWALKS, DRAINAGE SYSTEMS AND UTILITIES AS A DIRECT RESULT OF NEW CONSTRUCTION. ROAD IMPROVEMENTS SUCH AS BUT NOT LIMITED TO RESURFACING MAYBE REQUIRED.
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9. CONTRACTOR TO FIELD VERIFY ALL REPORTED INVERTS AND UTILITIES AND REPORT TO ENGINEER.
10. PROPANE TANKS TO BE UNDERGROUND.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NORTH

HATCH LEGEND

- PROPOSED BRICK PAVERS
- EXISTING CONCRETE TO REMAIN
- PROPOSED CONCRETE
- PROPOSED BUILDING FOOTPRINT

MARK	REVISION	DATE
1	REVISED PER COFP	5/29/15

DRAWING 15-053
DESIGNED J.B.B.
DRAWN J.B.B.
CHECKED J.B.B.
SCALE 1:20
DATE 4/15/2015

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SCHULKE, BITTLE & STODDARD, L.L.C.
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SITE PLAN

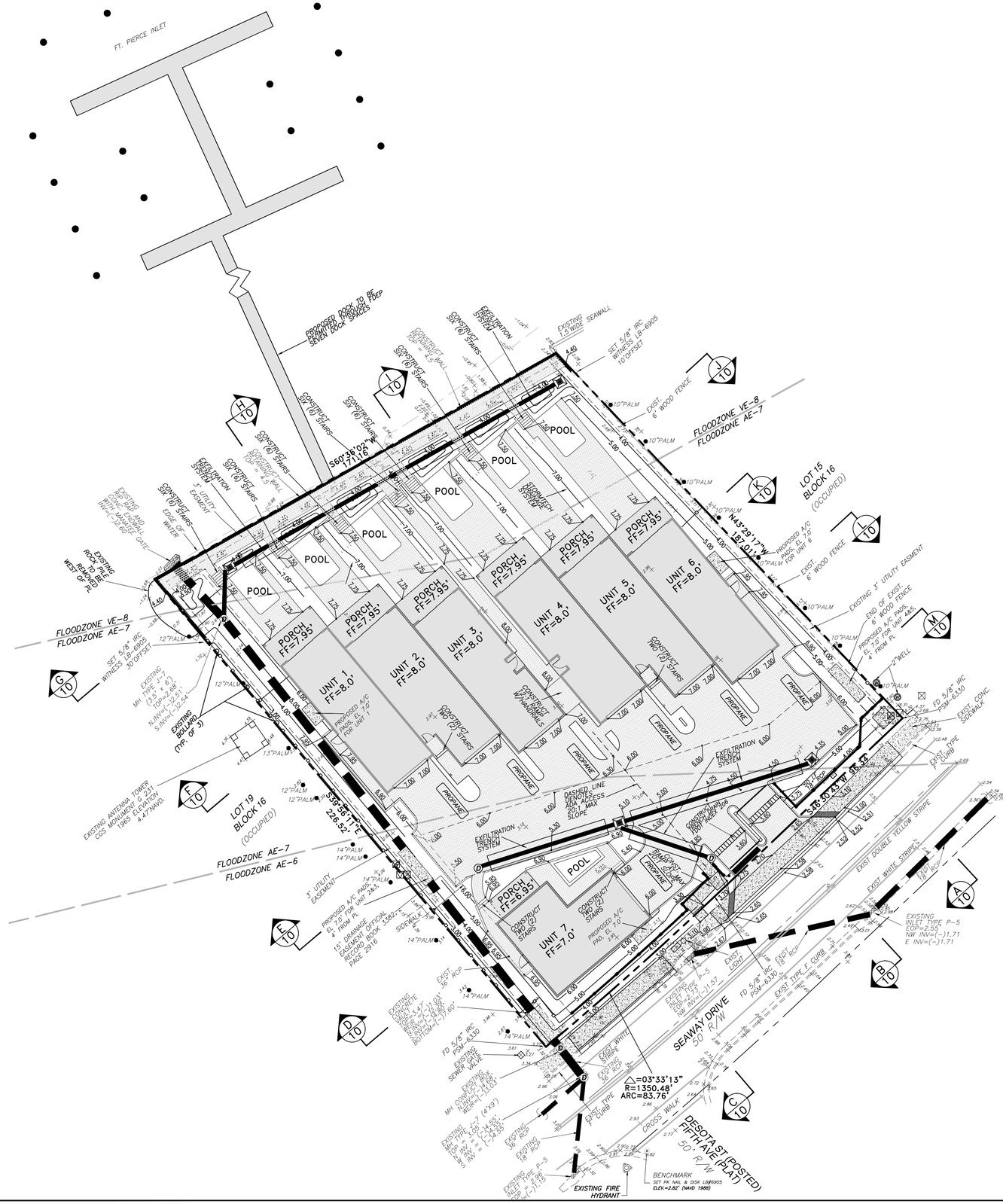
INLET PALMS

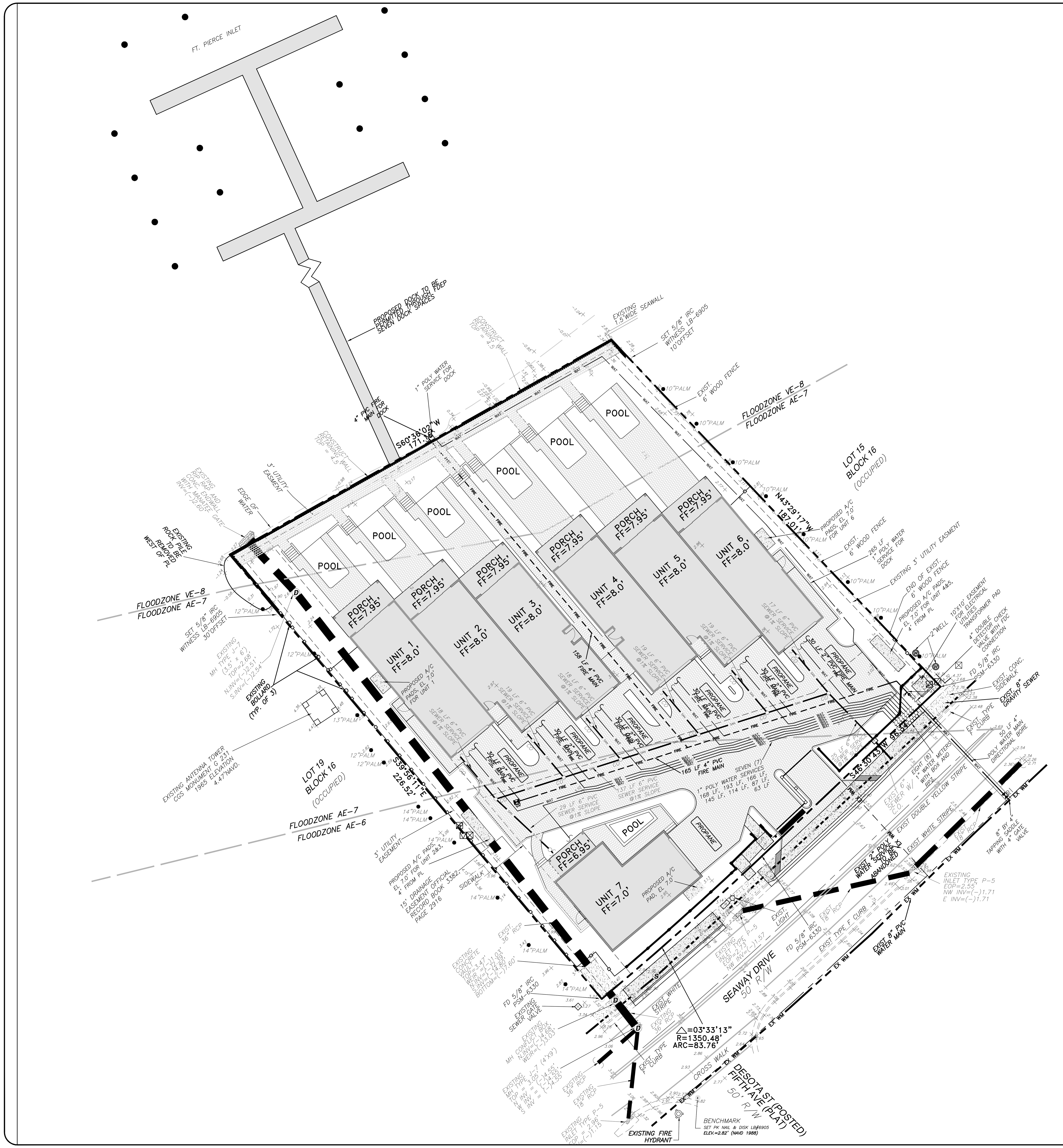
ENGINEER CERTIFICATION
- ☐ JOSEPH W. SCHULKE FL. REG. NO. 47045
- ☐ JODAH B. BITTLE FL. REG. NO. 57396
- ☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET 6

PROJECT NO. 15-053


FT. PIERCE INLET
PROPOSED DOCK TO BE CONSTRUCTED ON PILINGS SEVEN DOCK SPACES
CONSTRUCT SIX (6) STAIRS
EXCAVATION SYSTEM
CONSTRUCT TWO (2) STAIRS
EXISTING 1.5' WIDE SEAWALL
SET 5/8" IRC WITNESS LB-6905 10.0' OFFSET
EXIST. 6' WOOD FENCE
10"PALM
FLOODZONE VE-8
FLOODZONE AE-7
S60°36'02"W 71.16'
POOL
PORCH FF=7.95'
UNIT 1 FF=8.0'
UNIT 2 FF=8.0'
UNIT 3 FF=8.0'
UNIT 4 FF=8.0'
UNIT 5 FF=8.0'
UNIT 6 FF=8.0'
UNIT 7 FF=7.0'
PROPANE
CONSTRUCT TWO (2) STAIRS
CONSTRUCT CONC. RETAINING WALL WITH HANDRAILS
EXISTING AND PROPOSED CONC. ENCIRCLE WITH 4' HIGH GATE
EXISTING ROCK TO BE REMOVED WEST OF PL
SET 5/8" IRC WITNESS LB-6905 30.0'OFFSET
EXISTING MH TYPE "C" (3.5' x 6') TOP=7.68' INV=(-)2.54' S,W INV=(-)2.54'
EXISTING BOLLARD (TYP. OF 5)
PROPOSED A/C PADS EL 7.0' FOR UNIT 1
13"PALM
12"PALM
14"PALM
LOT 19 BLOCK 16 (OCCUPIED)
EXISTING ANTENNA TOWER COS MONUMENT "J 231" 1965 ELEVATION 4.47'NAVD.
S39°36'11"E 226.52'
FLOODZONE AE-7
FLOODZONE AE-6
5' UTILITY EASEMENT
PROPOSED A/C PADS EL 7.0' FROM PL FOR UNIT 2&3
15' DRAINAGE EASEMENT PER OFFICIAL RECORD BOOK 3382, PAGE 1916
SIDEWALK
EXIST. 16" RCP
EXISTING MH TYPE "C" (4'x4') TOP=7.45' INV=(-)1.05' W,E INV=(-)1.05' S INV=(-)1.05' BOTTOM=(-)7.65'
FD 5/8" IRC PSM-6330
EXISTING SEWER VALVE
EXISTING MH TYPE "C" (4'x4') TOP=7.48' INV=(-)3.03' W,E INV=(-)3.03'
EXISTING J-7 (4'x9') TOP=7.76' INV=(-)4.55' E INV=(-)4.55' S INV=(-)4.55'
EXISTING 16" RCP
EXISTING TYPE P-5 INLET TOP=7.71' INV=(-)1.15'
EXIST. WHITE STRIPE
EXISTING TYPE P-5 INLET TOP=7.46' INV=(-)1.57'
EXIST. TYPE F CURB
EXIST. LIGHT
SEAWAY DRIVE 50' R/W
△=03°33'13" R=1350.48' ARC=83.76'
CROSS WALK
DESOTAST (POSTED) FIFTH AVE (PLAT) 50' R/W
BENCHMARK SET PK NAIL & DISK LB#6905 ELEV.=2.82' (NAVD 1988)
EXISTING FIRE HYDRANT
LOT 15 BLOCK 16 (OCCUPIED)
N43°29'17"W 187.91'
PROPOSED A/C PADS EL 7.0' FOR UNIT 6
EXIST. 6' WOOD FENCE
EXISTING 3' UTILITY EASEMENT
END OF EXIST. 6' WOOD FENCE
PROPOSED A/C PADS EL 7.0' FOR UNIT 4&5
2"WELL
FD 5/8" IRC PSM-6330
EXIST. CONC. SIDEWALK
EXIST. TYPE F CURB
S36°50'43"W 96.58'
EXIST. DOUBLE YELLOW STRIPE
EXIST. WHITE STRIPE
EXISTING INLET TYPE P-5 EOP=2.55' NW INV=(-)1.71 E INV=(-)1.71
EXIST. 18" RCP
FD 5/8" IRC PSM-6330
EXIST. TYPE F CURB
DASHED LINE DENOTES CLEAN ACCESS 20.0' MAX SLOPE
CONSTRUCT CONC. RAMP WITH HANDRAILS
EXFILTRATION TRENCH SYSTEM
TRANSITION 20.0' MAX SLOPE
PROPOSED A/C PAD EL 7.0' FOR UNIT 7
CONSTRUCT TWO (2) STAIRS
A/C
A/C
A/C



LEGEND

— — EX SAN — —	EXISTING SANITARY SEWERLINE	9.0'R	PROPOSED EOP RADIUS
—— SAN ——	PROPOSED SANITARY SEWERLINE	PROPANE	1,000 GAL UNDERGROUND PROPANE TANK
	EXISTING DRAINAGE PIPE		24" ADS YARD DRAIN
	PROPOSED DRAINAGE PIPE		STORMTECH DRAIN
— — EX WM — —	EXISTING WATER MAIN		PROPOSED WALL
—— WAT ——	PROPOSED WATER MAIN		TRENCH DRAIN
—— SF ——	FILTER FENCE/SEDIMENT BARRIER		STREET LIGHT
	EXISTING WOOD FENCE		MODIFIED TYPE 'C' INLET
	PROPOSED FENCE		JUNCTION MANHOLE
24.45	PROPOSED SPOT ELEVATION AT EOP/SIDEWALK	DS-1	DRAINAGE STRUCTURE LABEL
25.0	PROPOSED GRADE / CONTOUR		FIRE HYDRANT
	PROPOSED DRAINAGE FLOW DIRECTION		PROPOSED SIGN
			SEWER MANHOLE

Legend & Abbreviations: (symbols not scaleable for size)

PLS	-	PROFESSIONAL LAND SURVEYOR
PSM	-	PROFESSIONAL SURVEYOR & MAPPER
LB	-	LAND SURVEYING BUSINESS
℄	-	CENTERLINE
R	-	RADIUS
L	-	LENGTH
△	-	DELTA ANGLE
E/P	-	EDGE OF PAVEMENT
B/C	-	BACK OF CURB
B.M.	-	BENCHMARK
POC	-	POINT OF COMMENCEMENT
POB	-	POINT OF BEGINNING
○	-	(PCP) PERMANENT CONTROL POINT
PCP	-	PERMANENT CONTROL POINT
◙	-	(PRM) PERMANENT REFERENCE MONUMENT
PRM	-	PERMANENT REFERENCE MONUMENT
O	-	(IP) IRON PIPE
IP	-	IRON PIPE
◉	-	(IRC) IRON ROD & CAP
IRC	-	IRON ROD & CAP
⊡	-	(CM) CONCRETE MONUMENT
CM	-	CONCRETE MONUMENT
FD	-	FOUND
(M)	-	MEASURED
(P)	-	PLAT
(C)	-	CALCULATED
	-	TRAFFIC CONTROL BOX
	-	GUY WIRE
	-	WOOD UTILITY POLE
	-	TELEPHONE SERVICE
	-	CABLE T.V. BOX
	-	ELECTRIC BOX
	-	LIGHT POST
	-	WELL
	-	HYDRANT
	-	GATE VALVE
	-	IRRIGATION VALVE
	-	WATER METER
	-	SANITARY MANHOLE
	-	SANITARY SERVICE
	-	SEPTIC TANK
	-	DRAINAGE MANHOLE
	-	CURB INLET
	-	SURFACE INLET
	-	MITERED END SECTION
	-	CONCEPTUAL DRAINAGE
	-	STREET SIGN
23.5	-	PROPOSED GRADE
NAVD	-	NORTH AMERICAN VERTICAL DATUM
x23.5	-	TYPICAL ELEVATION
A/C	-	AIR CONDITIONER
CONC.	-	CONCRETE
F.F.	-	FINISH FLOOR
BSB	-	BUILDING SETBACK LINE
EL./ELEV.	-	ELEVATION
R\W	-	RIGHT OF WAY
AB	-	AS-BUILT
P/K		PARKER-KALON

NOTES

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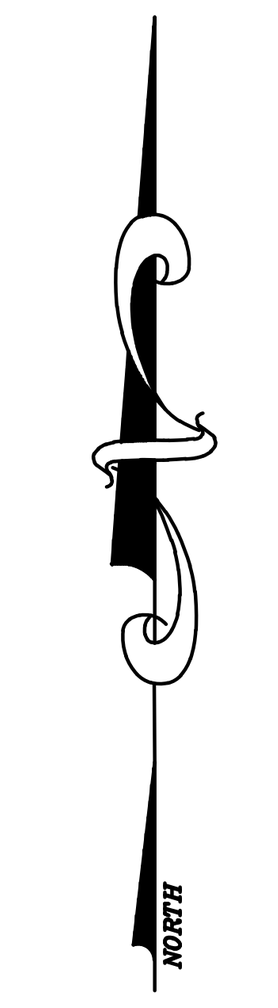

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

HATCH LEGEND

- PROPOSED BRICK PAVERS
- EXISTING CONCRETE TO REMAIN
- PROPOSED CONCRETE
- PROPOSED BUILDING FOOTPRINT

1. SUBMITTALS

A. PRODUCT DATA AND SHOP DRAWINGS

1. FOR ALL SITE WORK CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT PRODUCT DATA IN THE FORM OF MANUFACTURERS' CUT SHEETS AND CATALOG DATA FOR ALL PRODUCTS, MATERIAL AND EQUIPMENT CLEARLY INDICATING THE SPECIFIC PART OR PRODUCT CATALOG NUMBER(S) FOR APPROVAL.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL PRODUCTS, MATERIALS AND EQUIPMENT REQUIRED TO BE FABRICATED, OR WHEN STANDARD PUBLISHED PRODUCT DATA IS NOT SUITABLE FOR USE.
3. SUBMIT 6 COPIES OF REQUESTED INFORMATION, NEATLY BOUND AND INDEXED PER CATEGORY FOR THE FOLLOWING:
   A. UTILITIES:
   ALL PIPE, FITTINGS, VALVES, OTHER MISCELLANEOUS APPURTENANCES, CONTROLS, PUMP STATION EQUIPMENT, COMPONENTS AND STRUCTURES, AND ALL OTHER UTILITY SYSTEM PRODUCTS, MATERIALS AND COMPONENTS AND SIMILAR CONTROLS.
   B. DRAINAGE:
   ALL PIPE, FITTINGS, AND COMPONENTS THEREOF, STRUCTURES, FRAMES, GRATES, LIDS, GASKETS,FASTENERS, COUPLINGS AND SIMILAR, AND ALL OTHER DRAINAGE SYSTEM PRODUCTS, MATERIALS, AND COMPONENTS AND SIMILAR CONTROLS.
   C. PAVING AND GRADING:
   FDOT CERTIFICATIONS AND LAB ANALYSIS/RESULTS FOR PAVEMENT, BASE, SUBGRADE, AND FILL MATERIALS. INCLUDE EVIDENCE (CERTIFICATIONS) THAT THE MATERIALS PROPOSED TO BE USED MEET OR EXCEED FDOT SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
   D. SIGNING AND PAVEMENT MARKING:
   SIGN AND PAVEMENT MARKING PRODUCTS AND MATERIALS, AND EVIDENCE THAT THE PRODUCTS AND MATERIALS PROPOSED TO BE USED MEET OR EXCEED REQUIREMENTS SPECIFIED IN THE CONTRACT DOCUMENTS, LOCAL ENGINEERING DEPARTMENT, MUTCO AND FDOT SPECIFICATIONS.
   E. IRRIGATION:
   ALL PIPE, FITTINGS, VALVES, OTHER MISCELLANEOUS APPURTENANCES, CONTROLS, PUMP STATION EQUIPMENT, COMPONENTS AND STRUCTURES, AND ALL OTHER UTILITY SYSTEM PRODUCTS, MATERIALS AND COMPONENTS AND SIMILAR CONTROLS, WELLS, AND/OR OTHER IRRIGATION SOURCES. THE CONTRACTOR SHALL SUBMIT AN IRRIGATION COORDINATION DRAWING, INDICATING CONTRACTOR'S PROPOSED LOCATION OF MAIN LINES, SECONDARY LINES, HEAD LOCATIONS, WELL, PUMP, CONTROL PANEL, SENSORS, CONTROL VALVE AND VALVE LOCATIONS. THIS DRAWING SHOULD CLEARLY DEPICT ADJUSTMENTS OR CHANGES THE CONTRACTOR PROPOSES. THE DRAWINGS SHALL INDICATE ALL PROPOSED SUBSTITUTIONS OF SIZE, MATERIAL, AND/OR MANUFACTURER.
4. ALLOW TWO WEEKS FOR THE ENGINEER TO COMPLETE REVIEW OF PRODUCT DATA AND SHOP DRAWINGS. ENGINEER WILL NOT BE RESPONSIBLE FOR PROJECT DELAYS RELATED TO DELIVERY AND TRANSMISSION OF THE DOCUMENTS ONCE INFORMATION HAS LEFT ENGINEER'S OFFICE. ITEMS REQUIRING A LONG LEAD TIME SHOULD BE SUBMITTED AS SOON AS POSSIBLE.
5. THE CONTRACTOR SHALL PROVIDE A STAMP INDICATING ITS REVIEW AND APPROVAL, INITIALED OR SIGNED,CERTIFYING TO REVIEW OF SUBMITTAL, VERIFICATION OF PRODUCTS, FIELD MEASUREMENTS AND FIELD CONSTRUCTION CRITERIA, AND COORDINATION OF THE INFORMATION WITHIN THE SUBMITTAL WITH REQUIREMENTS OF THE WORK AND OF CONTRACT DOCUMENTS, INCLUDING PLANS AND SPECIFICATIONS OF OTHER DESIGN PROFESSIONALS (I.E.; ARCHITECT, MECHANICAL, ELECTRICAL, AND STRUCTURAL ENGINEERS).

B. TESTING

1. WATER: PRESSURE (MAIN AND TAPS), BACTERIOLOGICAL, BACKFILL DENSITIES, BACKFLOW PREVENTOR TESTS AND CERTIFICATION; AND AS PER PROJECT SPECIFICATIONS, LOCAL UTILITIES DEPARTMENT, AND FDEP REQUIREMENTS.
2. SEWER: EXFIL, TV, AND BACKFILL DENSITIES. PRESSURE TEST (MAINS AND TAPS) LIFT STATION START-UP, ALL PER PROJECT SPECIFICATIONS, COVB AND FDEP REQUIREMENTS.
3. DRAINAGE: EXFIL, LAMPING (FIELD), AND BACKFILL DENSITIES PER PROJECT SPECIFICATIONS AND LOCAL ENGINEERING REQUIREMENTS.
4. EARTHWORK & PAVING: DENSITIES, LBR'S AND FBV'S AS PER PROJECT SPECIFICATIONS AND LOCAL ENGINEERING REQUIREMENTS.
5. SUBMIT ALL TEST RESULTS FOR ENGINEERING REVIEW WITHIN 3 DAYS OF TESTING. FAILURE TO PROVIDE TEST RESULTS, OR PROVIDING FAILING TEST RESULTS WILL BE GROUNDS FOR DELAY AND/OR REJECTION OF PAY REQUEST APPLICATIONS.

C. AS-BUILTS

1. GRADING: LOCATION AND ELEVATION OF ALL: CONCRETE AND PAVEMENT (VEHICLE USE AND PEDESTRIAN USE IMPROVEMENTS) AT HI/LOW POINTS, EDGE OF PAVEMENT, AND CENTERLINE AT 50' ON CENTER AND AT CHANGE OF DIRECTION, GRADE BREAKS; PROPERTY LINES (CROSS SECTIONS 50' ON CENTER); TOP OF BANK AND T.O.E. OF SLOPE AND/OR CENTERLINE OF SWALES AND RETENTION AREAS; CROSS SECTIONS 50' ON CENTER ON STORMWATER LAKES FROM TOP TO BOTTOM; MECHANICAL PADS AND FINISHED FLOOR ELEVATIONS; DETAILED LOCATION AND TOPOGRAPHY OF DRIVEWAY TURNOUTS.
2. WATER AND SEWER FORCE MAINS: LOCATION, TOP ELEVATION AND STATE PLANE COORDINATES AT ALL FITTINGS, VALVES, CHANGES OF DIRECTION AND AT 100' ON CENTER.
3. GRAVITY SEWER:
   - SEWER STRUCTURES: DIAMETER OR SIZE, AND LOCATION AND ELEVATION OF STRUCTURES, TOP, BOTTOMS, AND SEWER INVERTS.
   - MAINS AND LATERALS: LOCATION AND INVERT ELEVATIONS AT CONNECTIONS, FITTINGS, AND TERMINATION.
   - LIFT STATIONS: HORIZONTAL LAYOUT AND LOCATION OF ALL EQUIPMENT, PANELS, VAULTS, WET WELL, VALVES; LOCATION OF CONDUIT RUNS AND WATER SERVICE/ HOSE BIBB; LOCATION AND INVERT ELEVATIONS OF GRAVITY AND FORCE MAINS TO AND FROM LIFT STATION; WET WELL DIAMETER, TOP AND BOTTOM ELEVATIONS; PUMP(S) SIZE, TYPE, DISCHARGE DIAMETER, MANUFACTURER AND MODEL #.
4. DRAINAGE: ALL STRUCTURES DIAMETER OR SIZE, LOCATION, AND ELEVATION OF TOP, BOTTOM, AND INVERT ELEVATIONS. ALL PIPES, DIAMETER, TYPE/MATERIAL, LOCATION AND INVERT ELEVATION AT CONNECTIONS, FITTINGS, AND TERMINATION POINTS.
5. IRRIGATION: ALL LINES, SYSTEM EQUIPMENT COMPONENTS, MATERIALS INCLUDING PIPES, VALVES, FITTINGS, SPRINKLER HEADS, AND MISCELLANEOUS APPURTENANCES.

D. OPERATION AND MAINTENANCE MANUALS

1. CONTRACTOR SHALL PROVIDE THE OWNER WITH OPERATION AND MAINTENANCE MANUALS FOR ALL OPERABLE EQUIPMENT (PUMP STATIONS AND CONTROLS, AUTOMATIC CONTROL VALVES, AND OTHER AUTOMATED EQUIPMENT; CONTROL PANELS, ETC.).
2. OPERATION AND MAINTENANCE MANUALS SHALL BE SUBMITTED AS A PRE-REQUISITE TO THE PROJECT BEING DEEMED SUBSTANTIALLY COMPLETE.

E. WARRANTY

THE CONTRACTOR SHALL PROVIDE ALL WARRANTIES, CERTIFICATIONS, GUARANTIES, AND WARRANTY BONDS AS SPECIFIED IN THE CONTRACT DOCUMENTS AND PERMIT CONDITIONS INCLUDING:
-UTILITY MAINTENANCE BOND - FOR ALL PUBLIC WATER AND SEWER UTILITIES INFRASTRUCTURE - (25% OF CONTRACT VALUE)
-ENGINEERING MAINTENANCE BOND - FOR ALL PAVING, GRADING, AND DRAINAGE IMPROVEMENTS AND INFRASTRUCTURE (25% OF CONTRACT VALUE)

4. OWNER TRAINING
THE CONTRACTOR SHALL INCLUDE 2 HOURS OF OWNER TRAINING (FOR EACH WATER, SEWER, DRAINAGE, AND IRRIGATION SYSTEMS) FOR ALL OPERABLE EQUIPMENT AND SHALL INCLUDE THE TIME FOR INITIAL ADJUSTMENTS OF EQUIPMENT AND TIME FOR ONE FOLLOW-UP VISIT AND ADJUSTMENTS OF EQUIPMENT 60 DAYS AFTER END USER HAD OPERATIONAL TIME WITH THE EQUIPMENT.

MARK	REVISION	DATE
1	REVISED PER COFP	5/29/15

DRAWING	15-053
DESIGNED	J.B.B.
DRAWN	J.B.B.
CHECKED	J.B.B.
SCALE	1:20
DATE	4/15/15

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SCHULKE, BITTLE & STODDARD, L.L.C.
CIVIL & STRUCTURAL ENGINEERING · LAND PLANNING · ENVIRONMENTAL PERMITTING
CERTIFICATION OF AUTHORIZATION NO.: 00008668
1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com

UTILITIES PLAN

INLET PALMS

ENGINEER CERTIFICATION
☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
☐ JODAH B. BITTLE FL. REG. NO. 57396
☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET
8

PROJECT NO.
15-053

LEGEND

HATCH LEGEND

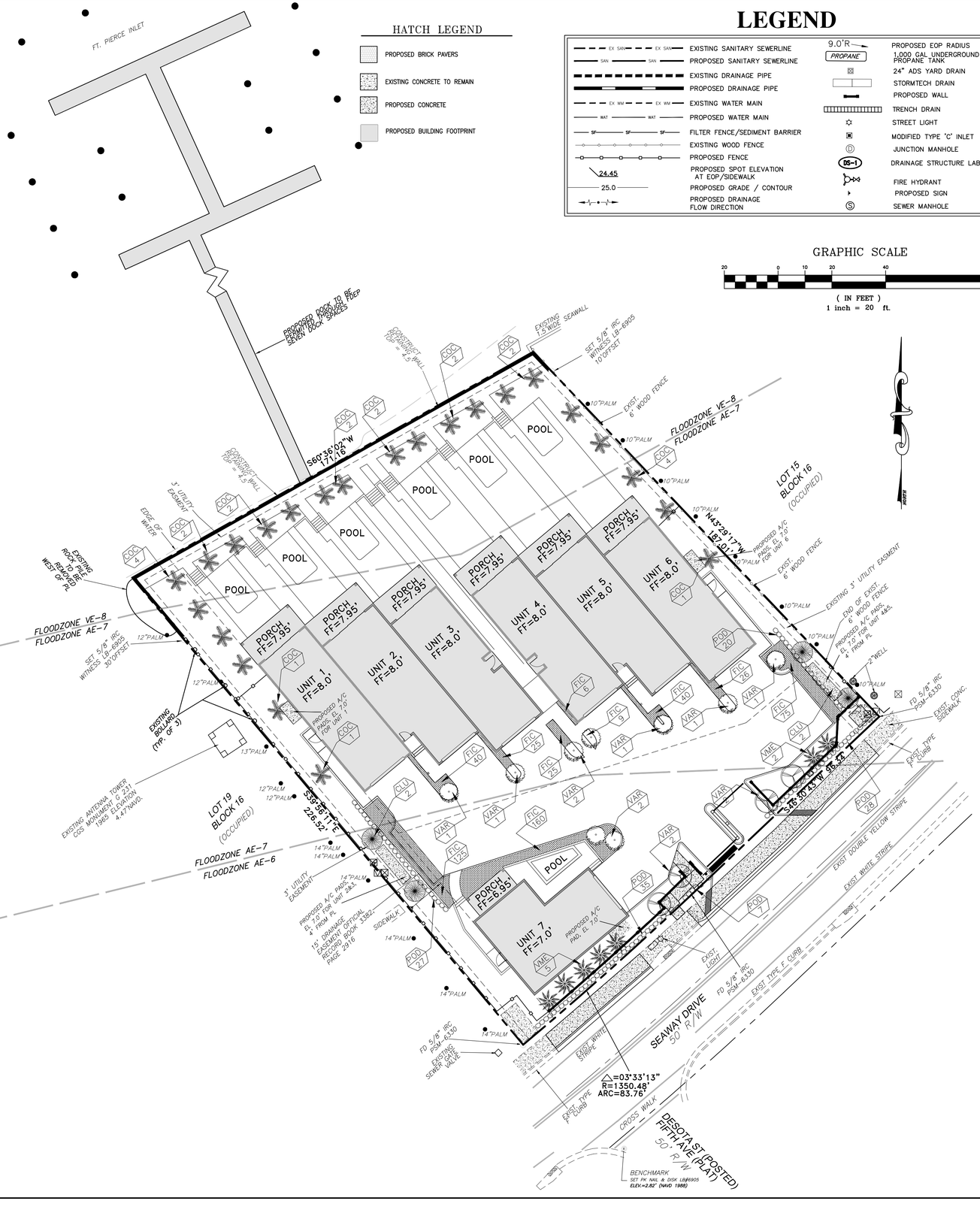
- PROPOSED BRICK PAVERS
- EXISTING CONCRETE TO REMAIN
- PROPOSED CONCRETE
- PROPOSED BUILDING FOOTPRINT

- EX SAN — EXISTING SANITARY SEWERLINE
- SAN — PROPOSED SANITARY SEWERLINE
- EXISTING DRAINAGE PIPE
- PROPOSED DRAINAGE PIPE
- EX WM — EXISTING WATER MAIN
- WAT — PROPOSED WATER MAIN
- SF — FILTER FENCE/SEDIMENT BARRIER
- EXISTING WOOD FENCE
- PROPOSED FENCE
- 24.45 — PROPOSED SPOT ELEVATION AT EOP/SIDEWALK
- 25.0 — PROPOSED GRADE / CONTOUR
- PROPOSED DRAINAGE FLOW DIRECTION
- 9.0'R — PROPOSED EOP RADIUS
- PROPANE — 1,000 GAL UNDERGROUND PROPANE TANK
- 24" ADS YARD DRAIN
- STORMTECH DRAIN
- PROPOSED WALL
- TRENCH DRAIN
- STREET LIGHT
- MODIFIED TYPE 'C' INLET
- JUNCTION MANHOLE
- DS-1 — DRAINAGE STRUCTURE LABEL
- FIRE HYDRANT
- PROPOSED SIGN
- SEWER MANHOLE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



Legend & Abbreviations: (symbols not scaleable for size)

PLS	-	PROFESSIONAL LAND SURVEYOR
PSM	-	PROFESSIONAL SURVEYOR & MAPPER
LB	-	LAND SURVEYING BUSINESS
℄	-	CENTERLINE
R	-	RADIUS
L	-	LENGTH
Δ	-	DELTA ANGLE
E/P	-	EDGE OF PAVEMENT
B/C	-	BACK OF CURB
B.M.	-	BENCHMARK
POC	-	POINT OF COMMENCEMENT
POB	-	POINT OF BEGINNING
⊹	-	(PCP) PERMANENT CONTROL POINT
PCP	-	PERMANENT CONTROL POINT
⊞	-	(PRM) PERMANENT REFERENCE MONUMENT
PRM	-	PERMANENT REFERENCE MONUMENT
○	-	(IP) IRON PIPE
IP	-	IRON PIPE
●	-	(IRC) IRON ROD & CAP
IRC	-	IRON ROD & CAP
□	-	(CM) CONCRETE MONUMENT
CM	-	CONCRETE MONUMENT
FD	-	FOUND
(M)	-	MEASURED
(P)	-	PLAT
(C)	-	CALCULATED
	-	TRAFFIC CONTROL BOX
	-	GUY WIRE
	-	WOOD UTILITY POLE
	-	TELEPHONE SERVICE
	-	CABLE T.V. BOX
	-	ELECTRIC BOX
	-	LIGHT POST
	-	WELL
	-	HYDRANT
	-	GATE VALVE
	-	IRRIGATION VALVE
	-	WATER METER
	-	SANITARY MANHOLE
	-	SANITARY SERVICE
	-	SEPTIC TANK
	-	DRAINAGE MANHOLE
	-	CURB INLET
	-	SURFACE INLET
	-	MITERED END SECTION
	-	CONCEPTUAL DRAINAGE
	-	STREET SIGN
23.5	-	PROPOSED GRADE
NAVD	-	NORTH AMERICAN VERTICAL DATUM
x23.5	-	TYPICAL ELEVATION
A/C	-	AIR CONDITIONER
CONC.	-	CONCRETE
F.F.	-	FINISH FLOOR
BSB	-	BUILDING SETBACK LINE
EL./ELEV.	-	ELEVATION
R/W	-	RIGHT OF WAY
AB	-	AS-BUILT
	-	PARKER-KALON

LANDSCAPE MATERIAL SCHEDULE

SYMBOL		AMOUNT	BOTANICAL NAME	COMMON NAME	SIZE	HGT	OTHER	NATIVE
	CLU	4	Clusia rosea	PITCH APPLE	2.5" DIA 4.5' AC	12'	5' SPREAD	YES
	VME	7	Veitchia merrillii	CHRISTMAS TREE PALM	10' CLEAR TRUNK	12'	5' SPREAD	YES
	WOD	4	Wodyetia bifurcata	FOX TAIL PALM	10' CLEAR TRUNK	12'	5' SPREAD	YES
	COC	23	Cocus nucifera	MAYPAN COCONUT	10' CLEAR TRUNK	12'	5' SPREAD	YES
	VAR	9	Veitchia arecina	MONTGOMERY PALM	10' CLEAR TRUNK	12'	5' SPREAD	YES
	POD	118	Podocarpus macrophyllus	PODOCARPUS	–	24"	24" O.C.	NO
	FIC	431	Ficus microcarpa	GREEN ISLAND FICUS	–	12"	24" O.C.	YES

SECTION 22-187. GENERAL LANDSCAPE CACLULATIONS

SECTION 22-187 (4) a and b.

SOUTH PROPERTY LINE: 180.1 LF MINUS 35 LF (DRIVEWAY) = 145.1 LF

REQUIRED:
1. LOTS UNDER 10,000 SF RECQUIRE A MINIMUM 6' WIDE BUFFER ALONG ROADWAY
2. ONE (1) TREE / 300 SF
3. 36 INCH HIGH CONTINUOUS OPAQUE FEATURE

PROPOSED:
1. 6' WIDE LANDSCAPE BUFFER
2. 141.5 LF X 6 LF X 1 TREE/300 SF = 2.8 OR 3 TREES
3. 6 FT HIGH CONTINUOUS CONCRETE WALL

SECTION 22-187 (6) a and b.

WEST PROPERTY LINE: 226.5 LF MINUS 172.5 LF (BUILDINGS/POOL) = 54.0 LF

REQUIRED:
1. 10 FT WIDE BUFFER
2. ONE (1) TREE / 200 SF
3. 6 FT HIGH CONTINUOUS OPAQUE FEATURE

PROPOSED:
1. 10' WIDE LANDSCAPE BUFFER
2. 54.0 LF X 10 LF X 1 TREE/200 SF = 2.7 OR 3 TREES
3. CONTINUOUS HEDGE PLANTED AT 24" THAT WILL GROW TO 36" IN ONE YEAR AND MAINTAINED AT 6 FT THERAFTER. 54.0 LF X 1 SHRUB / 2 LF = 27.0 SHRUBS

EAST PROPERTY LINE: 187.0 LF MINUS 146.6 LF (BUILDINGS/POOL) = 40.4 LF

REQUIRED:
1. 10 FT WIDE BUFFER
2. ONE (1) TREE / 200 SF
3. 6 FT HIGH CONTINUOUS OPAQUE FEATURE

PROPOSED:
1. 10' WIDE LANDSCAPE BUFFER
2. 40.4 LF X 10 LF X 1 TREE/200 SF = 2.0 OR 2 TREES
3. CONTINUOUS HEDGE PLANTED AT 24" THAT WILL GROW TO 36" IN ONE YEAR AND MAINTAINED AT 6 FT THERAFTER. 40.4 LF X 1 SHRUB / 2 LF = 20.0 SHRUBS

NORTH PROPERTY LINE: NOT APPLICABLE BECAUSE IT BORDERS THE INLET

SECTION 22-187 (7) a and b.

INTERIOR VEHICLE USE AREAS: N/A – NO LOTS WITH MORE THAN 14,000 SF VEHICULAR USE AREA

TOTAL PLANTINGS REQUIRED:

TOTAL TREES REQUIRED: 3 + 3 + 2 = 8 TREES

TOTAL SHRUBS REQUIRED: 27 + 20 = 47 SHRUBS

LANDSCAPE NOTES

SEC. 22-187. – GENERAL LANDSCAPING REQUIREMENTS.

ALL LANDSCAPE PLANS SHALL MEET OR EXCEED THE FOLLOWING GENERAL LANDSCAPING REQUIREMENTS WHICH SHALL BE CONSIDERED COMPLIMENTARY TO THE LANDSCAPING PROVISIONS OF ANY OTHER CITY ORDINANCE. THIS SECTION SHALL NOT APPLY TO LOTS SUBJECT TO SECTION 22–186 ABOVE. A CERTIFICATE OF OCCUPANCY SHALL NOT BE ISSUED ON ANY PERMIT FOR THE USE, CONSTRUCTION, REPAIR OR RENOVATION OF ANY STRUCTURE WITHIN THE CITY, WHETHER RESIDENTIAL, COMMERCIAL, INDUSTRIAL OR ACCESSORY, UNLESS APPLICATION FOR ANY SUCH PERMIT IS ACCOMPANIED BY A DETAILED LANDSCAPE PLAN MEETING ALL REQUIREMENTS OF THIS ARTICLE. THE DEPARTMENT IS NOT AUTHORIZED TO EXEMPT THE PERMIT APPLICATION FROM ANY REQUIREMENT EXCEPT AS EXPRESSLY PROVIDED FOR IN THIS ARTICLE.

(1)REQUIREMENTS FOR PLANT MATERIALS. PLANT MATERIALS USED FOR CONFORMANCE WITH THIS ARTICLE SHALL MEET OR EXCEED THE STANDARDS FOR FLORIDA NO. 1 AS SET OUT IN THE MOST CURRENT EDITION OF "GRADES AND STANDARDS FOR NURSERY PLANTS PART 1 AND PART 2.", STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, THE CLERK'S OFFICE SHALL MAINTAIN A STOCK OF THESE MANUALS TO BE GIVEN TO PERMIT APPLICANTS, PARTICULARLY THOUGH NOT EXCLUSIVELY TO HOMEOWNERS, FOR THE APPLICANT'S USE IN SUBMITTING THE REQUIRED LANDSCAPE PLAN. ALL TREES REQUIRED BY THIS ARTICLE (EXCLUDING PALMS THAT ARE EXEMPT FROM THE GRADES AND STANDARDS) SHALL HAVE A FLORIDA NO. 1 OR BETTER "GRADES AND STANDARDS" CERTIFICATION TAG ATTACHED AT TIME OF DELIVERY THROUGH FINAL INSPECTION. GRASS SOD SHALL BE CLEAN AND FREE OF WEEDS, PESTS AND DISEASES.

TREES:

A. TREES USED TO MEET THE REQUIREMENTS OF THIS SECTION SHALL BE SPECIES WHICH WHEN PLANTED HAVE A HEIGHT OF AT LEAST TWELVE (12) FEET AND HAVE TRUNKS WHICH CAN BE MAINTAINED IN A CLEAN CONDITION FOR OVER FIVE (5) FEET OF CLEAR WOOD. AT PLANTING, THE TREES SHALL HAVE A DIAMETER OF AT LEAST TWO AND ONE–HALF (2½) INCHES AT A POINT FOUR AND ONE–HALF (4½) FEET ABOVE GROUND LEVEL AND A SPREAD OF AT LEAST FIVE (5) FEET (EXCEPT FOR PALMS WHICH SHALL HAVE A MINIMUM CLEAR TRUNK OF TEN (10) FEET).

B. TREES USED TO MEET THE REQUIREMENTS OF THIS SECTION SHALL ALSO BE SPECIES WHICH IN THE COUNTY NORMALLY GROW IN A MANNER SUCH THAT AT MATURITY THEY WILL HAVE A MINIMUM CROWN SPREAD OF FIFTEEN (15) FEET AND A MINIMUM HEIGHT OF FIFTEEN (15) FEET. TREES WHICH CAN MEET THE HEIGHT REQUIREMENT AT MATURITY BUT NOT THE CROWN REQUIREMENTS MAY BE GROUPED TO FORM A WIDER CROWN, BUT WILL BE COUNTED AS ONE TREE. THREE PALMS MAY BE SUBSTITUTED FOR ONE TREE PROVIDED THAT FIFTY (50) PER CENT OF REQUIREMENT SHALL BE TREES.

C. FIFTY (50) PER CENT OF THE REQUIRED TREES SHALL BE SPECIES OTHER THAN PALM TREES (PALMACEAE FAMILY) EXCEPT WHEN PLANTED IN ACCORDANCE WITH AN APPROVED PLAN PREPARED BY A FLORIDA REGISTERED LANDSCAPE ARCHITECT.

D. TREES OF SPECIES WHOSE ROOTS ARE KNOWN TO CAUSE DAMAGE TO PUBLIC ROADWAYS OR OTHER PUBLIC WORKS SHALL NOT BE PLANTED CLOSER THAN TWELVE (12) FEET TO SUCH PUBLIC WORKS, UNLESS THE TREE ROOT SYSTEM IS COMPLETELY CONTAINED WITHIN A BARRIER FOR WHICH THE MINIMUM INTERIOR CONTAINING DIMENSIONS SHALL BE THREE (3) FEET TIMES FIVE (5) FEET AND FIVE (5) FEET DEEP, AND FOR WHICH THE CONSTRUCTION REQUIREMENTS SHALL BE SIX–INCH THICK CONCRETE WITH FIBER MESH AND NO WIRE MESH OR BY A ROOT BARRIER PRODUCT APPROVED BY THE CITY ENGINEER.

E. NONE OF THE FOLLOWING TREES SHALL BE PLANTED IN THE CITY AND WHERE THEY PRESENTLY EXIST WHEN PERMIT APPLICATION IS MADE, THEIR REMOVAL SHALL BE A CONDITION OF ANY FINAL DEVELOPMENT ORDER: MELALEUCA, LEUCADENDRON (PUNK TREE), SCHINUS TEREBINTHIFOLIUS (BRAZILIAN PEPPER) AND CASUARINA SBP. (AUSTRALIAN PINE), NOR MAY ANY OF THE FOLLOWING TREES BE PLANTED FOR PURPOSES OF COMPLYING WITH REQUIREMENTS OF THIS ARTICLE: ANY SPECIES DESIGNATED AS CATEGORY I ON THE EXOTIC PLANT PEST COUNCIL'S CURRENT LIST OF "FLORIDA'S MOST INVASIVE SPECIES", CUPANIOPSIS ANACARDIOIDES (CARROTWOOD), DALBERGIA SISSOO (ROSEWOOD), ALBIZZIA LEBBECK (WOMAN'S TONGUE), ARAUCARIA HETEROPHYLLA (NORFOLK ISLAND PINE), GREVILLEA ROBUSTA (SILK OAK), MELIA AZADARACHA (CHINABERRY), FICUS SPP. (NON–NATIVE FICUS), EUCALYPTUS SPP. (EUCALYPTUS).

F. SHRUBS AND HEDGES. SHRUBS USED TO MEET THE REQUIREMENTS OF THIS SECTION SHALL BE A MINIMUM OF TWENTY–FOUR (24) INCHES IN HEIGHT WHEN PLANTED. HEDGES, WHERE REQUIRED, SHALL BE PLANTED AND MAINTAINED SO AS TO FORM A THIRTY–SIX–INCH OR HIGHER CONTINUOUS, UNBROKEN, SOLID, VISUAL SCREEN.

G. GROUND COVERS. GROUND COVERS USED IN LIEU OF GRASS, OR IN PART, TO MEET THE REQUIREMENTS OF THIS SECTION, SHALL BE PLANTED IN SUCH A MANNER AS TO PRESENT A FINISHED APPEARANCE AND REASONABLY COMPLETE COVERAGE WITHIN THREE (12) MONTHS AFTER PLANTING.

H. GRASS. GRASS USED TO MEET THE REQUIREMENTS OF THIS SECTION SHALL BE PLANTED WITH SPECIES NORMALLY GROWN AS PERMANENT LAWNS IN THE COUNTY. GRASS AREAS WILL BE SODDED, EXCEPT THAT PLUGGING, SPRIGGING OR SEEDING OF GRASSY AREAS IS PERMISSIBLE WITH RESPECT TO SINGLE– FAMILY AND TWO–FAMILY RESIDENTIAL LOTS. AS TO ALL LOTS, SOLID SOD SHALL BE USED IN SWALES, DETENTION OR RETENTION AREAS AND OTHER AREAS SUBJECT TO EROSION.

I. EXISTING PLANT MATERIAL. WHEN PLANT MATERIAL EXISTS ON A SITE PRIOR TO THE DATE APPLICATION FOR A PERMIT IS MADE, CREDIT MAY BE ALLOWED FOR SUCH PLANT MATERIAL PROVIDED THAT IT IS PROTECTED DURING CONSTRUCTION AND INCORPORATED INTO THE REQUIRED LANDSCAPING IN A MANNER WHICH SATISFIES THE REQUIREMENTS OF THIS ARTICLE.

(12) INSTALLATION OF LANDSCAPING. ALL LANDSCAPING REQUIRED BY THIS ARTICLE SHALL BE INSTALLED IN COMPLIANCE WITH THESE REQUIREMENTS:

A. LANDSCAPING SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN, INCLUDING ALL SPECIFIED CONDITIONS TO A PARTICULAR LANDSCAPE APPROVAL, AND INSPECTED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. SUCH INSPECTION SHALL INCLUDE VERIFICATION THAT PLANTING SOIL MEETS SPECIFIED COMPOSITION AND DEPTH REQUIREMENTS. IN THE EVENT THERE ARE ANY CHANGES TO THE APPROVED LANDSCAPE PLAN, SUCH CHANGES MUST BE REVIEWED AND APPROVED BY THE DEPARTMENT AND NOTED ON THE PLAN PRIOR TO NOTIFICATION FOR THE FINAL INSPECTION FOR A CERTIFICATE OF OCCUPANCY.

B. LANDSCAPED AREAS SHALL BE COVERED IN THEIR ENTIRETY WITH SHRUBS, GROUND COVER, TURF, OR THREE (3) INCHES OF BULK ORGANIC MULCH OR OTHER SUITABLE MATERIAL WHICH PERMITS PERCOLATION AND IS APPROVED BY THE DEPARTMENT. WHERE MULCH IS USED, IT MUST BE PROTECTED FROM WASHING OUT OF THE PLANTING BED. INORGANIC MULCH, SUCH AS GRAVEL OR ROCK, SHOULD ONLY BE USED WHERE WASHOUTS OCCUR. THE FINAL INSPECTION PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY, SHALL INCLUDE VERIFICATION THAT ANY MULCH IS INSTALLED AT THE REQUISITE DEPTH.

C. TREES WHICH ARE BALLED AND BURLAPED MUST HAVE THE BURLAP REMOVED OR FOLDED DOWN AT THE TIME OF THE PLANTING. ALL TWINE OR ROPE MUST BE REMOVED. IF WIRE BASKETS ARE USED, THE UPPER ROWS MUST BE CUT BEFORE PLANTING. REMOVE ALL SOIL FROM ABOVE THE ROOT FLARE AND PLANT THE TREE SO THE TOP OF THE ROOT BALL IS TEN (10) PER CENT ABOVE THE LANDSCAPE SOIL. DO NOT PLACE ANY SOIL OR MULCH OVER THE ROOT BALL. IF STAKES OR GUIDE WIRES ARE USED TO SUPPORT A TREE, THE WIRE MUST BE COVERED WITH PROTECTIVE MATERIAL WHERE IT IS IN CONTACT WITH THE TREE AND THE STAKES OR GUIDE WIRES MUST BE REMOVED AFTER ONE YEAR.

D. ALL LANDSCAPING REQUIRED BY THE CITY MUST BE PROTECTED FROM VEHICULAR AND PEDESTRIAN TRAFFIC BY THE INSTALLATION OF CURBING, WHEEL STOPS OR OTHER PROTECTIVE DEVICES ALONG THE PERIMETER OF ANY LANDSCAPING WHICH ADJOINS VEHICULAR USE AREAS OR SIDEWALKS. THESE PROTECTED DEVICES SHALL HAVE A MINIMUM HEIGHT OF SIX (6) INCHES ABOVE GRADE.

E. NO PARKING, DISPLAY OF VEHICLES OR OUTSIDE STORAGE OR DISPLAY OF MERCHANDISE IS PERMITTED IN OR OVER ANY REQUIRED LANDSCAPE AREA, NOR ARE VEHICLES PERMITTED TO OVERHANG ANY REQUIRED LANDSCAPED AREA.

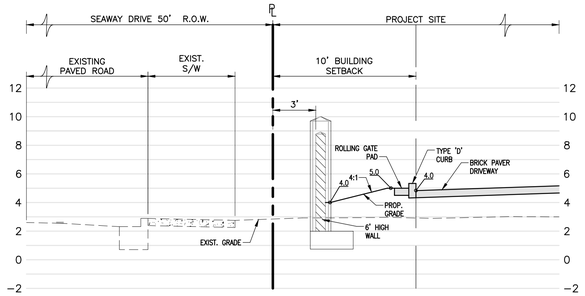
F. SOIL, EXCEPT FOR PLANTING SOIL, IN WHICH REQUIRED LANDSCAPE IS TO BE INSTALLED MUST BE GENERALLY INDIGENOUS TO THE LOCALE. SOIL MUST BE LOOSE, FRIABLE, AND FREE OF LIMESTONE AND OTHER CONSTRUCTION MATERIALS, ROAD BASE MATERIAL, ROCKS, WEEDS, GRASSES, HARD PAN, CLAY OR OTHER DEBRIS. PH SHALL BE ADJUSTED WHERE NECESSARY TO BE COMPATIBLE WITH THE PLANT SPECIES BEING INSTALLED. SOIL SHALL BE SLIGHTLY SWALED TO RETAIN SURFACE STORMWATER. BACKFILL SOIL MATERIAL SHALL BE THOROUGHLY WATERED IN AND AROUND PLANT ROOT BALLS TO PREVENT ANY AIR POCKETS. THE USE OF AMENDED AND ENRICHED SOILS MAY BE REQUIRED BY THE DEPARTMENT WHERE NECESSARY TO INCREASE THE WATER RETENTION CAPABILITIES OF SOIL IN ORDER TO REDUCE THE AMOUNT OF WATERING NEEDED TO MEET THE LANDSCAPING WATER REQUIREMENT. FINAL INSPECTION OF REQUIRED LANDSCAPE PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY SHALL INCLUDE PH TESTING TO VERIFY COMPATIBILITY WITH PERMITTED PLANTINGS.

G. TO MINIMIZE TRAFFIC HAZARDS AT STREET OR DRIVEWAY INTERSECTIONS, ALL LANDSCAPING INSTALLATIONS MUST PROVIDE UNOBSTRUCTED VIEWS AS REQUIRED IN SECTION 22–53

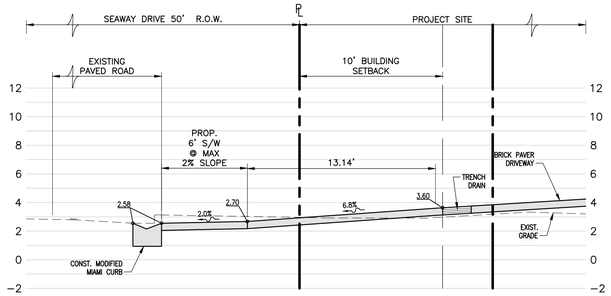
H. ANY IRRIGATION SYSTEM PLACED ON CITY RIGHT–OF–WAY WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER WHO SHALL RELOCATE, REPLACE OR REPAIR THE SYSTEM AS APPROPRIATE IN THE EVENT IT IS DAMAGED DUE TO PERMITTED CONSTRUCTION IN THE RIGHT–OF–WAY.

I. PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY, FINAL LANDSCAPE INSTALLATION SHALL BE CERTIFIED AS COMPLETE AND IN CONFORMANCE TO THE APPROVED LANDSCAPE PLAN BY SUBMISSION OF A CERTIFICATION LETTER BY A LANDSCAPE ARCHITECT.

(13)MAINTENANCE OF LANDSCAPING. PROPERTY OWNERS SHALL MAINTAIN ALL REQUIRED LANDSCAPING SO THAT IT CONTINUES TO PRESENT A HEALTHY, NEAT AND ORDERLY APPEARANCE FREE OF REFUSE AND DEBRIS, IN CONFORM



SECTION A



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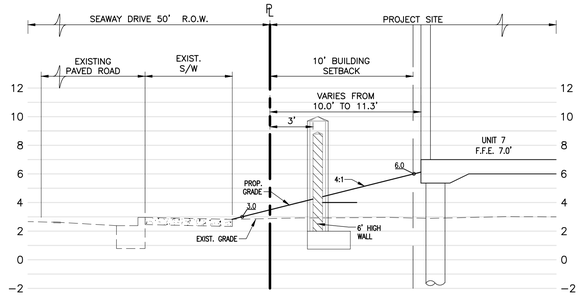

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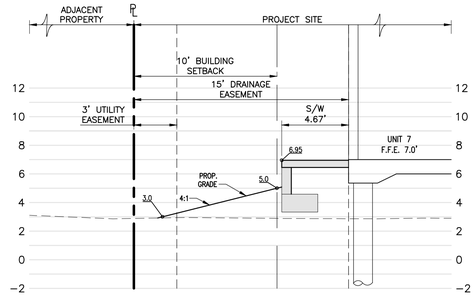

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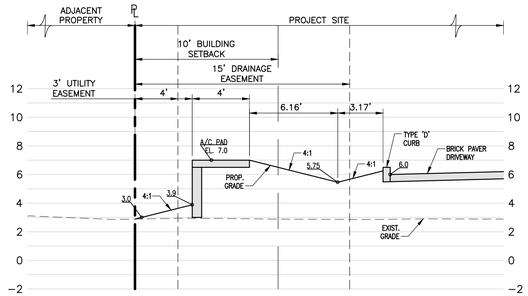

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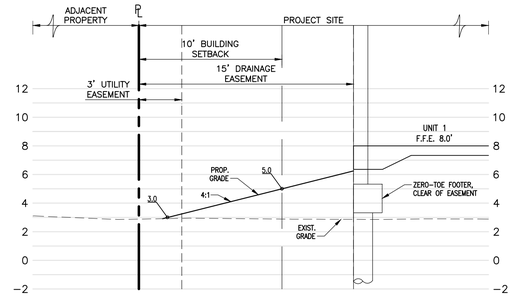

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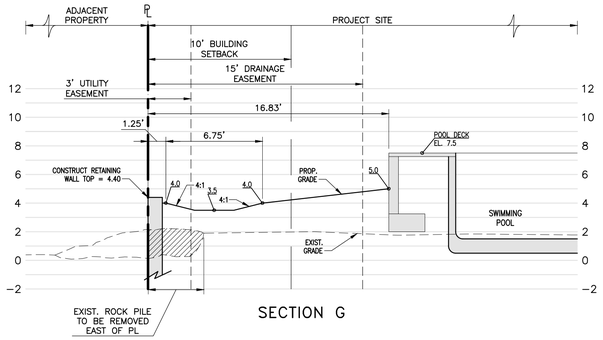

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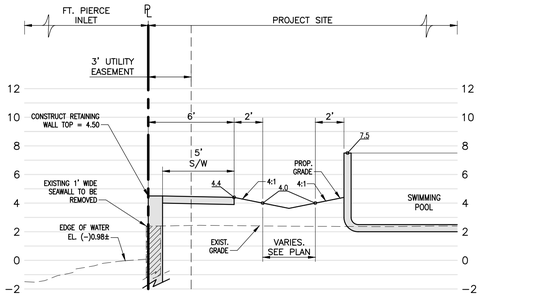

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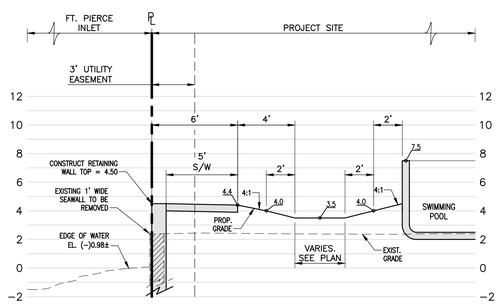
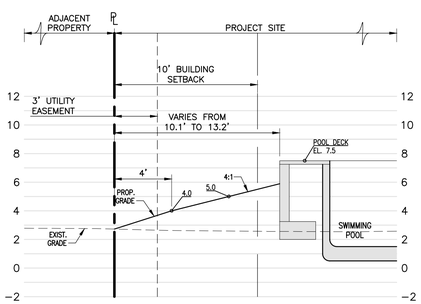


SECTION I



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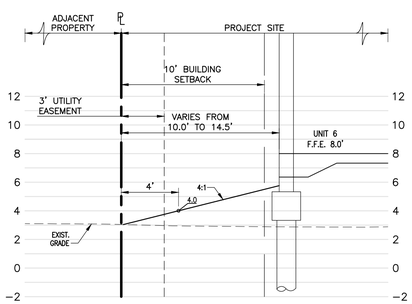

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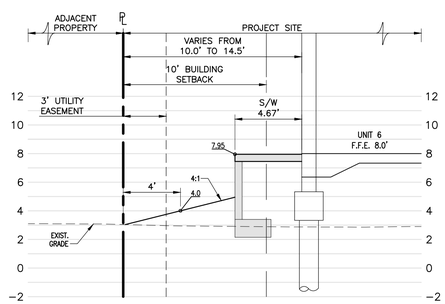

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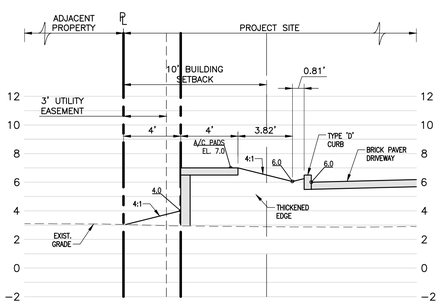

SECTION M

MARK	REVISION	DATE
1	REVISED PER COFP	5/29/15

DRAWING	15-053
DESIGNED	J.B.B.
DRAWN	J.B.B.
CHECKED	J.B.B.
SCALE	1"=5'
DATE	4/15/15

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CROSS SECTIONS

INLET PALMS

ENGINEER CERTIFICATION
- ☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
- ☐ JODAH B. BITTLE FL. REG. NO. 57396
- ☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET 10

PROJECT NO. 15-053

SPECIFICATIONS - CLEARING/GRADING/PAVING/DRAINAGE/UTILITY CONSTRUCTION

GENERAL:
IT IS INTENDED THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION', LATEST REVISIONS, BE USED WHERE APPLICABLE FOR VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THAT WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY, THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT. IN ADDITION THE CONTRACTOR SHALL REFER TO THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS", LATEST REVISIONS. IF WITHIN THAT PARTICULAR SECTION ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE A PART OF THE STANDARD SPECIFICATIONS, ALSO.
ALL WORK SHALL BE IN A WORKMANLIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED TO BEGIN WORK.
THE CONTRACTOR SHALL GIVE THE ENGINEER 24 HOURS NOTICE PRIOR TO REQUESTING REQUIRED INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.
THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF PROJECT ACCEPTANCE, DURING WHICH ALL FAULTY CONSTRUCTION AND/OR MATERIALS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

CLEARING/GRUBBING
THE CONTRACTOR SHALL COMPLETELY REMOVE AND DISPOSE OF ALL BUILDING, TIMBER, BRUSH, STUMPS, ROOTS, RUBBISH, DEBRIS, INCLUDING SEPTIC TANK, BUILDING FOUNDATIONS, PIPES, ETC., WITHIN THE LIMITS OF THE ROADWAY CONSTRUCTION, ALL AREAS WHERE STRUCTURES WILL BE CONSTRUCTED INCLUDING PIPE CULVERTS, AND AS OTHERWISE DEPICTED IN THE PLANS, ALL IN ACCORDANCE WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.

GRADING:
THE CONTRACTOR SHALL PERFORM ALL GRADING NECESSARY TO ACHIEVE THE PROPOSED PLAN GRADES, FINAL DRESSING SHALL HAVE A TOLERANCE OF 0.1 FT.+- FROM THE PLAN CROSS SECTIONS. GRADING SHALL INCLUDE ALL SHAPING, ROUGH GRADING, AND FINAL DRESSING REQUIRED FOR THE PROPOSED ROADWAY AND ROAD EMBANKMENTS WITHIN THE LIMITS DEPICTED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE FINISHED GRADES UNTIL CONTRACT CLOSE-OUT, AND MUST RE-GRADE AS REQUIRED WHEN EROSION OR OTHER DISTURBANCES OCCUR. SEED/MULCH AND/OR SODDING SHALL BE INCORPORATED TO ASSIST IN THIS REGARD. HOWEVER, ANY LOSS OF SOD OR SEED/MULCH DURING THESE OCCURANCES SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

SOD:
SOD SHALL BE ST. AUGUSTINE OR ARGENTINE BAHIA - AS NOTED ON THE LANDSCAPE PLANS OR CONTRACT DOCUMENTS. SOD SHALL BE WELL MATTED WITH ROOTS AND SHALL BE SUFFICIENTLY THICK TO SECURE A DENSE STAND OF LIVE GRASS. THE SOD SHALL BE LIVE, FRESH AND UNINJURED AT THE TIME OF PLANTING AND SHALL BE REASONABLY FREE OF WEEDS AND OTHER GRASSES. THE RECEIVING GROUND SURFACE SHALL BE GRADED TO PROPER ELEVATIONS, FREE OF LARGE VOIDS, ROOTS, WEEDS OR PATCHES OF EXISTING GRASS. UPON LAYING, THE ENTIRE AREA SHALL BE ROLLED THOROUGHLY. ALL SODDED AREAS ARE TO BE WATERED TO KEEP SOD ALIVE UNTIL THE CONTRACTOR IS CLOSED OUT, DEAD SOD SHALL BE REPLACED BY CONTRACTOR.

EMBANKMENT CONSTRUCTION
ROADWAY EMBANKMENT CONSTRUCTION SHALL CONSIST OF ALL THE EMBANKMENT CONSTRUCTION REQUIRED FOR THE PROPOSED ROADWAY AND/OR PARKING LOT, BUILDING PADS, DITCHES AND SWALES IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS. EMBANKMENTS SHALL BE CONSTRUCTED FROM MATERIAL CONTAINING NO MUCK, STUMPS, ROOTS,BRUSH,VEGETABLE MATTER, RUBBISH, OR OTHER DELETERIOUS MATERIALS THAT WILL NOT COMPACT TO A SUITABLE ENDURING ROAD BED. EXISTING EARTH SURFACES SHALL BE COMPACTED/PROOF ROLLED PRIOR TO PLACEMENT OF ANY EMBAMKMENT MATERIAL.
MATERIAL: UNLESS OTHERWISE SPECIFIED, MATERIAL SHALL BE "TYPE 2 MATERIAL".
COMPACTION: 12" COMPACTED LIFTS, MINIMUM 98% MAXIMUM DRY DENSITY (A.A.S.H.T.O. T-180).
- MIN. 100% MAX DENSITY ADJACENT TO STRUCTURES WITHIN PAVED AREAS
COMPENSATION: COMPENSATION FOR THE EMBANKMENT CONSTRUCTION SHALL BE MADE FULLY BY THE BID ITEMS FOR BORROW EXCAVATION
(PER C.Y.), GRADING (PER L.F. OF ROADWAY OR PER ACRE OF SITE), AND REGULAR EXCAVATION (PER C.Y.) WHEN APPLICABLE.

EMBANKMENT AND BACKFILL MATERIAL:
TYPE 1: WELL GRADED CRUSHED STONE OR CRUSHED GRAVEL (ASTM C33-71A, GRADATION 67) - ¾" TO NO. 4 SIEVE.
TYPE 2: SANDY MATERIAL, AND MAY BE UNCLASSIFIED MATERIAL OBTAINED FROM CONTRACTOR'S EXCAVATIONS AND APPROVED BY THE ENGINEER. THIS MATERIAL SHALL BE FREE FROM WOOD, ROOTS, HUMUS, PEAT, MUCK, AND OTHER ORGANIC MATERIALS, AND SHALL NOT CONTAIN CLODS, STONES, MASONRY, RUBBLE OR THE LIKE GREATER THAN 1½ INCHES IN DIAMETER.
TYPE 3: SELECT GRANULAR SAND MATERIAL, FREE OF ORGANICS WITH LESS THAN 3% FINES PASSING THE NO. 200 SIEVE.

STAKING
CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

STABILIZING
STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO THE FLORIDA BEARING VALUE OR L.B.R. AS PER PLAN FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, AND IN ACCORDANCE WITH SECTION 160 OF THE STANDARD SPECIFICATIONS. ALL STABILIZED AREAS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. ALL MATERIAL SHALL BE MIXED TO A HOMOGENEOUS MASS.

BASE COURSE
THE BASE SHALL BE CONSTRUCTED OF EITHER LIMEROCK MATERIAL IN ACCORDANCE WITH SECTION 911 OR CEMENTED COQUINA SHELL MATERIAL IN ACCORDANCE WITH SECTION 915 OF THE STANDARD SPECIFICATIONS.
LIMEROCK BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 200 AND CEMENTED COQUINA SHELL BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 259 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE ROCK PIT CERTIFICATION FOR CEMENTED COQUINA SHELL MATERIAL. BASE SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 AND TO AN L.B.R. VALUE WHEN SPECIFIED ON PLANS. BASE SHALL BE APPROVED PRIOR TO PRIME COAT.

PRIME AND TACK COAT
PRIME AND TACK COATS FOR THE BASE COURSE SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

ASPHALT CONCRETE SURFACE COURSE (A.C.S.C.)
TYPE SP 9.5 & TYPE SP 12.5 A.C.S.C. SHALL BE CONSTRUCTED FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, IN ACCORDANCE WITH SECTIONS 320, 330, AND 334 OF THE STANDARD SPECIFICATIONS.

CEMENT CONCRETE PAVEMENT:
CONSTRUCT PORTLAND CEMENT CONCRETE (TYPE II, CLASS I) PAVEMENT IN ONE COURSE ON A PREPARED STABILIZED SUBGRADE IN ACCORDANCE WITH SECTIONS 346 AND 350, PROVIDE STEEL REINFORCEMENT WHEN SPECIFIED IN THE PLANS.

CURB
ALL CURB CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS, AND IN ACCORDANCE WITH F.D.O.T. INDEX NO. 300. PROVIDE CONTRACTION JOINTS AT 10-FOOT O.C. MAXIMUM. TRANSITION ENDS OF CURB FROM FULL TO ZERO HEIGHTS IN 3-FEET. CURB CUT RAMPS SHALL BE IN ACCORDANCE WITH F.D.O.T. INDEX NO. 304.

TESTING:
THE CONTRACTOR SHALL RETAIN THE SERVICES OF AN APPROVED INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS ON EMBANKMENT,SUBGRADE, BASE, PIPE BACKFILL, AND SURFACE COURSE MATERIALS. TEST RESULTS MUST BE SUBMITTED PRIOR TO ANY REQUEST FOR PAYMENT ON THE ABOVE ITEMS.

THE SCHEDULE FOR TESTING THE ROAD/PAVEMENT AREAS CONSTRUCTION SHALL BE AS FOLLOWS:
A. EMBANKMENT: DENSITY TESTS SHALL BE TAKEN AT A MAXIMUM OF 5,000 SF. INTERVALS FOR EACH 12" LIFTS CONSTRUCTED, AND AT ALL EXISTING PROOFROLLED EARTH SURFACES.
B. SUBGRADE: (1) F.B.V./ L.B.R. (PER PLAN) TEST SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SF / 10,000 SF OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN SUBSOIL CONDITIONS. (MIN. OF 3 / 1 PER JOB)
(2) DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SF OR CLOSER AS MIGHT BE NECESSARY.
C. BASE: (1) F.B.V./ L.B.R. (PER PLAN) TEST SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SF / 10,000 SF OR CLOSER (MIN. OF 3 / 1 PER JOB)
(2) DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 5000 SF OR CLOSER AS MIGHT BE NECESSARY.
D. PIPE BACKFILL: DENSITY TESTS SHALL BE TAKEN AT A MAXIMUM OF 50 FT. INTERVALS, 1' ABOVE PIPE, 1' BELOW GRADE, MIN., AND AT PIPE DEPTHS GREATER THAN 5 FT, AN ADDITIONAL TEST SHALL BE TAKEN AT MID DEPTH OF BACKFILL
E. STRUCTURES: A MINIMUM OF 1 DENSITY TEST SHALL BE PERFORMED IN THE STABILIZED SUBGRADE, AND WITHIN THE BACKFILL FOR EACH 12" LIFT, ADJACENT TO EACH STRUCTURE INSTALLED.
F. BUILDING PAD: AS SPECIFIED IN ARCHITECTURAL PLANS.
G. CURB PADS - DENSITY TEST SHALL BE TAKEN AT A MAXIMUM OF 500 FT. INTERVALS.

ALL TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

CLEAN-UP
THE CONTRACTOR MUST PROVIDE CLEAN-UP OF EXCESS CONSTRUCTION MATERIAL UPON COMPLETION OF THE PROJECT. THE SITE MUST BE LEFT IN A NEAT, CLEAN, GRADED CONDITION.

DRAINAGE STRUCTURE SPECIFICATIONS
STORM INLETS AND MANHOLES SHALL BE CONSTRUCTED IN GENERAL ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI. ALL REINFORCING STEEL TO BE ASTM A 615-72 GRADE 40, FY = 40,000 PSI, AND SHALL BE HANDLED AND PLACED IN ACCORDANCE WITH ACI 318-71. PRECAST CONCRETE MANHOLES AND STORM INLETS MAY BE USED UPON THE ENGINEER'S APPROVAL OF THE MANUFACTURER'S SHOP DRAWINGS.

PRECAST INLETS/MANHOLES
ALL STORM INLETS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH APPLICABLE REFERENCES TO FOOT DRAWINGS IN THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS", LATEST EDITION. TYPE II PORTLAND CEMENT SHALL BE USED IN THE CONCRETE MIX. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28-DAYS OF 4000 PSI.

CULVERT PIPES
INSTALL PIPE CULVERTS AND STORM SEWERS IN ACCORDANCE WITH SECTION 430 AND RELATED SECTIONS OF THE STANDARD SPECIFICATIONS AT THE LOCATIONS DEPICTED IN THE PLANS. FURNISH AND INSTALL SANDTIGHT (WATERTIGHT TO 2 PSI) PIPE JOINTS AND PIPESTRUCTURE JOINTS. ALL JOINTS SHALL BE GASKETED REINFORCED CONCRETE PIPES (R.C.P.) SHALL BE IN ACCORDANCE WITH SECTION 941 OF THE STANDARD SPECIFICATIONS CORRUGATED ALUMINUM PIPE SHALL BE IN ACCORDANCE WITH SECTION 945 OF THE STANDARD SPECIFICATIONS. ADS (CORRUGATED POLYETHYLENE) SHALL BE IN ACCORDANCE WITH SECTION 948-2.3 OF THE STANDARD SPECIFICATIONS.

BACKFILLING OVER PIPE CULVERT AND STORM SEWERS SHALL BE COMPLETED IN MAXIMUM 4" LIFTS TO THE SPRINGLINE MAXIMUM 8" LIFTS, TO A POINT 12" ABOVE THE PIPE, AND IN 12" LIFTS BEYOND, COMPACTED TO A MINIMUM OF 98% OF MAXIMUM DRY DENSITY. TYPE 2 MATERIAL SHALL BE USED FOR ALL BACKFILL, UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.

FURNISH AND INSTALL FILTER FABRIC JACKET AROUND ALL PIPE JOINTS AND THE JOINT BETWEEN THE PIPE AND THE STRUCTURE IN ACCORDANCE WITH DESIGN STANDARDS INDEX NUMBERS 201 & 280. USE FABRIC MEETING THE PHYSICAL REQUIREMENTS OF TYPE 3 SPECIFIED ON THE DESIGN STANDARDS, INDEX 199. THE FABRIC SHALL EXTEND A MINIMUM OF 12 INCHES (300 MM) BEYOND EACH SIDE OF THE JOINT OR BOTH EDGES OF THE COUPLING BAND, IF A COUPLING BAND IS USED. THE FABRIC SHALL HAVE A MINIMUM WIDTH OF 24 INCHES (600 MM) AND A LENGTH SUFFICIENT TO PROVIDE A MINIMUM OVERLAP OF 24 INCHES (600 MM). SECURE THE FILTER FABRIC JACKET AGAINST THE OUTSIDE OF THE PIPE BY METAL OR PLASTIC STRAPPING OR BY OTHER METHODS APPROVED THE THE ENGINEER.

CONCRETE
UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28-DAYS OF 3000 PSI. ALL WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE AND THE APPLICABLE BUILDING CODES HAVING JURISDICTION IN THE AREA.

RECORD DRAWINGS
CONTRACTOR SHALL KEEP AND MAINTAIN RECORD DRAWINGS ON THE PROJECT SITE AT ALL TIMES WHICH SHALL BE ANNOTATED BY THE CONTRACTOR DEPICTING ANY CHANGES MADE IN THE FIELD WHICH DIFFER FROM THE CONTRACT DRAWINGS. RECORD DRAWINGS SHALL INCLUDE, BUT ARE NOT LIMITED TO, HORIZONTAL LOCATION AND VERTICAL ELEVATION OF INVERT AND TOP OF CULVERTS, SEWER MANHOLES, DRAINAGE STRUCTURES, INLETS, UTILITY MAINS AND AS-BUILTS OF ALL LAKE BANKS, LOTS/BLDG., PADS, SWALES, BERMS, CURBS, PAVEMENT, SIDEWALKS- DEPICTING HORIZONTAL LOCATION AND ELEVATIONS. CONTRACTOR SHALL SUBMIT COMPLETE AND FINAL RECORD DRAWINGS TO ENGINEER UPON COMPLETION OF PROJECT AND PRIOR TO FINAL INSPECTION AND FINAL PAYMENT.

THE CONTRACTOR SHALL BE REQUIRED TO HAVE A SURVEYOR PROVIDE CERTIFIED RECORD DRAWINGS/AS-BUILTS. THESE DRAWINGS SHALL BE PROVIDED IN AN ACAD ELECTRONIC FILE AS WELL AS ON SIGNED/SEALED HARD COPIES. THE AS-BUILTS MUST MEET I.R.C. UTILITY DEPT. CRITERIA FOR WATER MAIN AND SEWER AS-BUILTS, INCLUDING TIES TO STATE PLANE COORDINATES.

INSPECTION
MINIMUM CONSTRUCTION INSPECTION CHECKPOINTS
THE ENGINEER SHALL BE NOTIFIED 24 HOURS IN ADVANCE.
A. PRIOR TO ANY MAJOR DEVIATION FROM THE APPROVED PLANS.
B. PRIOR TO BACKFILLING ANY PIPE TRENCHES.
C. UPON COMPLETION OF SUBGRADE AND COMPACTION.
D. PRIOR TO POURING CURBS, SIDEWALKS OR OTHER FLATWORK.
E. UPON BEGINNING OF SPREADING OF ROCK BASE MATERIAL.
F. UPON COMPLETION OF GRADING AND COMPACTION OF BASE MATERIAL AND PRIOR TO PRIMING.
G. IMMEDIATELY PRIOR TO AND UPON APPLICATION OF A.C.S.C.
H. UPON COMPLETION OF CONSTRUCTION.

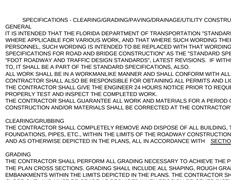
ACCEPTABLE TEST RESULTS MUST BE PROVIDED TO THE ENGINEER PRIOR TO COMMENCING SUCCESSIVE STEPS OF CONSTRUCTION, INCLUDING:
- PIPE BACKFILL AND EMBANKMENT DENSITIES PRIOR TO SUBGRADE PREPARATION.
- SUBGRADE TESTING PRIOR TO BASE PREPARATION, CONCRETE CURB OR SIDEWALK CONSTRUCTION.
- BASE TESTING PRIOR TO APPLICATION OF SURFACE COURSE.

WHERE REFERENCES ARE MADE TO ROADWAY CONSTRUCTION, IT IS INTENDED TO INDICATE CONSTRUCTION FOR ROADWAYS AND/OR PARKING LOTS/DRIVEWAYS.

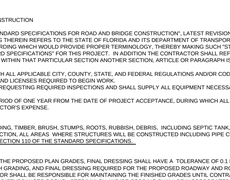
TRAFFIC/PAVEMENT MARKING NOTES:
1. ALL PARKING SPACE MARKINGS AND ROADWAY MARKINGS ON PRIVATE DRIVEWAYS/STREETS WITH THE EXCEPTION TO THE HANDICAPPED PARKING SPACES SHALL BE MARKED IN REFLECTORIZED TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATIONS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010, SECTION NO. 710.
2. ALL HANDICAPPED PARKING SPACES SHALL BE PROPERLY SIGNED AND MARKED IN ACCORDANCE WITH THE F.D.O.T.'S STANDARD INDEX NO. 173246.
3. TRAFFIC FLOW ARROWS THRU PARKING AREAS ARE FOR DIRECTION AND ARE TO BE PAINTED.
4. STOP BARS SHALL BE 24" WIDE.
5. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN WITH F.D.O.T. TRAFFIC DESIGN STANDARDS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. ALL PAVEMENT MARKINGS FOR THE PROPOSED PUBLIC ROADWAYS AND ALL MARKINGS AT INTERSECTIONS OF PRIVATE ROADS/DRIVEWAYS WITH PUBLIC ROADS SHALL BE EXTRUDED TYPE ALKYD BASE THERMOPLASTIC AND SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION NO. 711.
7. SPECIAL MARKINGS (CROSS WALK, STOP BARS, ROADWAY CONTINUOUS STRIPING, THRU ARROWS, PAVEMENT MARKINGS FOR TRAFFIC SEPARATORS, ETC. SHALL BE IN ACCORDANCE WITH THE F.D.O.T. INDEX NO. 17346.

SIGNS:
1. ALL SIGNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. ALL SIGNS SHALL BE TYPE 'C' SINGLE COLUMN GROUND SIGNS IN ACCORDANCE WITH F.D.O.T. INDEX NO. 11860, 11863, 11865. WIND LOAD SHALL BE ZONE 3 (80 M.P.H.).
3. ALL SIGNS PLACEMENT SHALL BE IN ACCORDANCE WITH F.D.O.T. INDEX NO. 17302.

ADDITIONAL SPECIFICATIONS FOR WORK WITHIN A PUBLIC R.O.W.:
1. ALL MATERIALS AND CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION). STANDARD SPECIFICATIONS (LATEST EDITION) AND THE SUPPLEMENTS THERETO.
2. THE APPLICANTS ENGINEER RESPONSIBLE FOR CONSTRUCTION INSPECTION SHALL INSURE THAT THE MAINTENANCE OF TRAFFIC PLAN (MOT) FOR THE PROJECT IS IN ACCORDANCE WITH THE APPLICABLE FDOT INDEX NUMBERS (600 SERIES) AND THESE DOCUMENTS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (U.S DEPARTMENT OF TRANSPORTATION, FHWA). THE CONTRACTOR SHALL PROVIDE NECESSARY M.O.T. AS SPECIFIED IN THE PLANS AND PERMITS, AND AS DIRECTED IN THE FIELD BY THE ENGINEER OR PUBLIC WORKS/FDOT REPRESENTATIVE.
3. AT THE END OF EACH WORK PERIOD, ANY DROP-OFF IN THE AREA ADJACENT TO THE TRAVEL WAY OF THE STATE ROAD SHALL BE BACKFILLED IN ACCORDANCE WITH STANDARD INDEX 600 OR SHALL BE OTHERWISE PROTECTED WITH TEMPORARY BARRIER WALL AT THE CONTRACTORS EXPENSE.
4. IF THE PERMITTED WORK IS ON A ROADWAY THAT HAS BEEN SELECTED AS A HURRICANE OR DISASTER EVACUATION ROUTE, THE APPLICANT, AT THE PERMITTING CONFERENCE IS REQUIRED TO PRESENT, AS PART OF THE WORK PLAN, AN EMERGENCY FUNCTIONAL RESTORATION PLAN TO ADDRESS EVENTUALITIES DURING CONSTRUCTION.
5. THE CONTRACTOR MUST CALL THE APPROPRIATE COUNTY TRAFFIC ENGINEERING DIVISION, HAVING JURISDICTION OVER THE PROJECT AT LEAST 48 HOURS, BEFORE ANY EXCAVATION WITHIN THE FDOT RIGHT-OF-WAY TO DETERMINE THE LOCATION OF THE EXISTING TRAFFIC SIGNAL INTERCONNECT CABLE.
6. THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. RELOCATION OF UTILITIES SHALL BE COORDINATED WITH UTILITY COMPANIES AFTER IDENTIFICATION OF CONFLICT BY CONTRACTOR. CONTRACTOR WILL NOTIFY ENGINEER IN ADVANCE BEFORE ANY RELOCATION.
7. BEFORE PERMIT APPROVAL AND CONSTRUCTION OF THIS PROJECT, THE APPLICANT MUST CONTACT THE FLORIDA DEPARTMENT OF TRANSPORTATION LOCAL MAINTENANCE OFFICE TO SCHEDULE A PRE-CONSTRUCTION MEETING. THE TELEPHONE NUMBER IS 561-465-7366 OR 1-800-300-8236.
8. THE APPLICANT AT THE EARLIEST CONVENIENT TIME SHALL NOTIFY IN WRITING ALL RIGHT-OF-WAY USERS AFFECTED BY THE CONSTRUCTION OF THIS PROJECT.
9. ALL CURB CUT RAMPS MUST FACE IN THE DIRECTION OF PEDESTRIAN TRAVEL.
10. AT THE END OF EACH WORK PERIOD, ANY DROP-OFF IN THE AREA ADJACENT TO THE TRAVEL OF THE STATE ROAD SHALL BE BACKFILLED IN ACCORDANCE WITH STANDARD INDEX 600 OR SHALL BE OTHERWISE PROTECTED WITH TEMPORARY BARRIER WALL AT THE CONTRACTORS EXPENSE. IN ACCORDANCE WITH STANDARD INDEX 600 OR SHALL BE OTHERWISE PROTECTED WITH TEMPORARY BARRIER WALL AT THE CONTRACTORS EXPENSE.
11. ALL HOT LANE CLOSURE SIGNS SHALL BE COVERED WHEN LANES ARE NOT CLOSED. NO LANES ARE TO BE CLOSED BEFORE 9:00 AM AND ALL LANES ARE TO OPENED BY 4:00 PM.
12. PAVEMENT SPECIFICATION: MATCH EXISTING TYPE AND DEPTH OF ASPHALT TO 3 1/2" MAXIMUM., INCLUDING FRICTION COURSE.

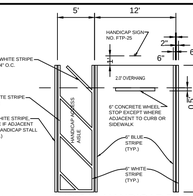


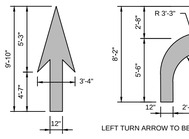
TYPICAL STANDARD PARKING STALL
N.T.S.



TYPICAL HANDICAP PARKING STALL
N.T.S.

NOTE:
A) ALL PARKING SPACES WITH EXCEPTION OF THE HANDICAPPED PARKING SPACES SHALL BE MARKED IN WHITE, RETRO-REFLECTIVE TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROADS BRIDGE CONSTRUCTION, 1996, SECTION 710.
B) ALL HANDICAP PARKING SPACES SHALL BE PROPERLY SIGNED AND MARKED IN ACCORDANCE WITH FDOT STANDARD INDEX 17346.



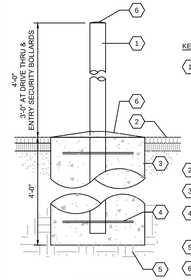


LEFT TURN ARROW TO BE REVERSED

PAVEMENT MARKING ARROWS
N.T.S

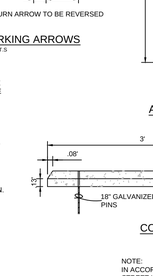
NOTES:
1. THIS SIGN MAY ALSO BE WALL MOUNTED

THESE SIGNS TYPICAL AT EACH ACCESSIBLE PARKING SPACE

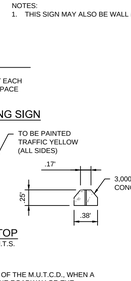


KEYED NOTES:
1. HSS 6"Ø x .28" THICK PIPE, CONCRETE FILLED. PROVIDE 1/4" WELDED CLOSURE PLATE AT BOTTOM. ALL STEEL TO BE RUST FREE AND PRIME COATED. BOLLARDS ON WALK TO RECEIVE GRAY POLYETHYLENE COVER. ALL OTHERS TO RECEIVE A YELLOW COVER (FROM IDEAL SHIELD- 313-842-7290).
2. TOP OF PAVEMENT.
3. 24"Ø CONCRETE FOUNDATION. USE SONOTUBE FORM.
4. 3/8"Ø WELDED HOOPS. 18"Ø TOP, BOTTOM, AND CENTER.
5. SOLID UNDISTURBED SOIL.
6. PROVIDE PITCH, SMOOTH CONCRETE FINISH.

TYPICAL PIPE BOLLARD DETAIL
N.T.S



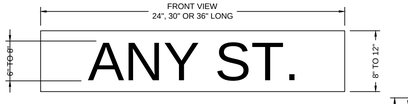
CONCRETE WHEEL STOP
N.T.S.



ACCESSIBLE PARKING SIGN
N.T.S

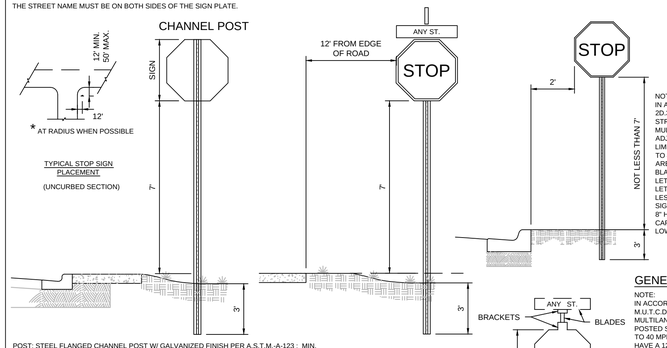
NOTE:
IN ACCORDANCE WITH SECTION 2D.38 OF THE M.U.T.C.D., WHEN A STREET INTERSECTS WITH A MULTILANE ROADWAY OR THE ADJACENT STREET POSTED SPEED LIMIT IS GREATER THAN OR EQUAL TO 40 MPH, STREET NAME SIGNS ARE REQUIRED TO HAVE A 12" HIGH BLANK WITH 8" HIGH CAPITAL LETTERS OR 6" HIGH LOWER CASE LETTERS. WHEN THE SPEED LIMIT IS LESS THAN 40 MPH, STREET NAME SIGNS ARE REQUIRED TO HAVE AN 8" HIGH BLANK WITH 6" HIGH CAPITAL LETTERS OR 4.5" HIGH LOWER CASE LETTERS.

STREET NAME SIGN (SNS) or (D-3)

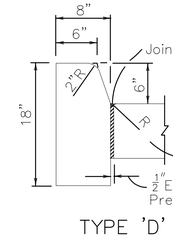


THE STREET NAME MUST BE ON BOTH SIDES OF THE SIGN PLATE.

EXTRUDED BLADE SECTION



POST: STEEL FLANGED CHANNEL POST W/ GALVANIZED FINISH PER A.S.T.M.-A-123 ; MIN. WEIGHT: TWO LBS. PER FOOT, 7/16 " DIA. HOLES, 1" APART TOP TO BOTTOM.
A CONCRETE FOOTER IS NOT REQUIRED UNLESS IT IS SHOWN ON THE PLAN.



TYPE 'D' CURB

GENERAL SPECIFICATIONS:

FLAT PLATE, ALCOA # 86054.6063-T6 ALLOY, ETCHED, DEGREASED WITH #1200 ALODINE FINISH WITH #2277 GREEN SCOTCHLITE BACKGROUND OR EQUAL.

DIMENSIONS: 8"H, 24",30" OR 36"L., .08" THICK ALUMINUM.

MULTI-LANE ROADS DIMENSIONS: 12"H, 24",30" OR 36"L., .08" THICK ALUMINUM

LETTERS: NAME - 6" SERIES "B" #2270, SUFFIX LETTERS - 3". SCOTCHLITE (SILVER) OR EQUAL.

MULTI-LANE ROADS LETTERS: NAME - 8" SERIES "B" #2270, SUFFIX LETTERS - 4". SCOTCHLITE (SILVER) OR EQUAL.

GENERAL SPECIFICATIONS:

NOTE:
IN ACCORDANCE WITH SECTION 2D.38 OF THE M.U.T.C.D., WHEN A STREET INTERSECTS WITH A MULTILANE ROADWAY OR THE ADJACENT STREET POSTED SPEED LIMIT IS GREATER THAN OR EQUAL TO 40 MPH, STREET NAME SIGNS ARE REQUIRED TO HAVE A 12" HIGH BLANK WITH 8" HIGH CAPITAL LETTERS OR 6" HIGH LOWER CASE LETTERS. WHEN THE SPEED LIMIT IS LESS THAN 40 MPH, STREET NAME SIGNS ARE REQUIRED TO HAVE AN 8" HIGH BLANK WITH 6" HIGH CAPITAL LETTERS OR 4.5" HIGH LOWER CASE LETTERS.

POST: 2"X2" 12 GAUGE GALVANIZED SQUARE TUBING SIGN POST WITH OPEN HOLES & GALVANIZED FINISH PER A.S.T.M. -A-123. WITHOUT ANCHO

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, OR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 11 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 3 INCH AND SMALLER PIPELINES.
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO SUCH PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THWN WIRE.
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/ COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/ COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR ARE CASING.
13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

FORT PIERCE UTILITIES AUTHORITY	WATER DISTRIBUTION		G-1 NOTES
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 2	

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE, AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIRED ABOVE SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 18' MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SEWER SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISTING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICE, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 6 FEET BETWEEN THE JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER.
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES. PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITIES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER MAN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

FORT PIERCE UTILITIES AUTHORITY	WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS		G-2 CONSTRUCTION NOTES
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	

STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING, (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN THE JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING), AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART II 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 II OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

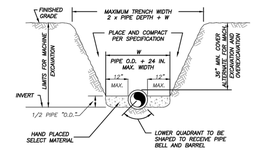
WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

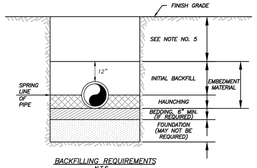
3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

FORT PIERCE UTILITIES AUTHORITY	STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT		G-3 WATER/SEWER CONFLICT
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	

TYPICAL TRENCH DETAIL
N.T.S.

FORT PIERCE UTILITIES AUTHORITY	TYPICAL TRENCH DETAILS		M-1
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	



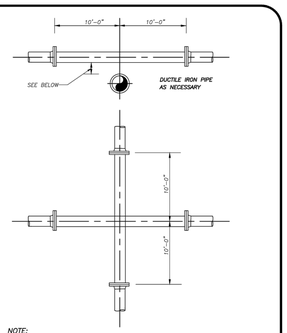


BACKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
2) BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
3) HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
4) INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY(AASHTO T-99)
5) BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE, THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.
6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTORS EXPENSE.
7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

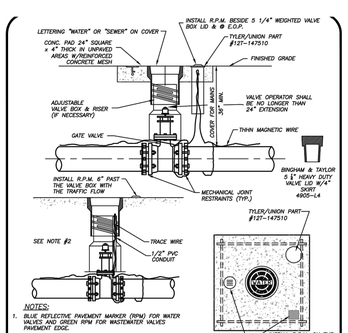
FORT PIERCE UTILITIES AUTHORITY	BACKFILLING REQUIREMENTS		M-2
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	



NOTE:
PLEASE REFER TO FORT PIERCE UTILITIES STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS.

UTILITY CROSSING DETAIL
N.T.S.

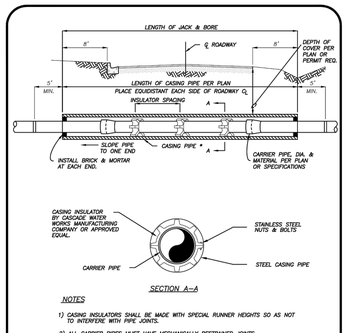
FORT PIERCE UTILITIES AUTHORITY	UTILITY CROSSING DETAIL		M-5
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	



NOTES:
1. BLUE REFLECTIVE PAVEMENT MARKER (RPM) FOR WATER VALVES AND GREEN RPM FOR WASTEWATER VALVES IN PAVEMENT EDGE.
2. FOR WATER AND WASTEWATER VALVES INSTALLED IN PAVED AREAS, ELIMINATE CONCRETE PAD AND ENCASE THE MAGNETIC WIRE IN 1/2" PVC INSIDE THE VALVE BOX SEVEN INCHES BELOW GRADE.
3. DIP MAY BE USED 12 FEEDS ONLY IF A VALVE BOX IS NOT MANUFACTURED FOR THAT DEPTH. NO 5'x'C RISERS SHALL BE USED IN ANY CIRCUMSTANCES.

TYPICAL GATE VALVE & WEIGHTED VALVE BOX DETAIL
N.T.S.

FORT PIERCE UTILITIES AUTHORITY	TYPICAL GATE VALVE & WEIGHTED VALVE BOX DETAIL		M-6
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	

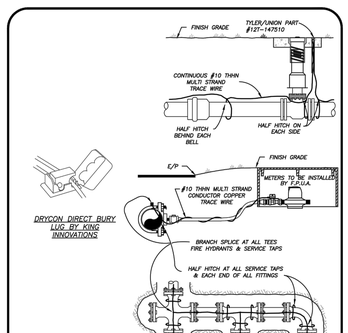


SECTION A-A

NOTES
1) CASING INSULATORS SHALL BE MADE WITH SPECIAL RUNNER HEIGHTS SO AS NOT TO INTERFERE WITH PIPE JOINTS.
2) ALL CARRIER PIPES MUST HAVE MECHANICALLY RESTRAINED JOINTS.
3) INSULATOR SPACING SHALL BE AS REQUIRED BY THE MANUFACTURER, HOWEVER, NO LESS THAN THREE (3) CASING INSULATORS SHALL BE INSTALLED PER LENGTH OF PIPE.
4) CASING LENGTH SHALL EXTEND A MINIMUM OF 8 FEET BEYOND THE EDGE OF PAVEMENT OR CURBING.

JACK & BORE DETAIL
N.T.S.

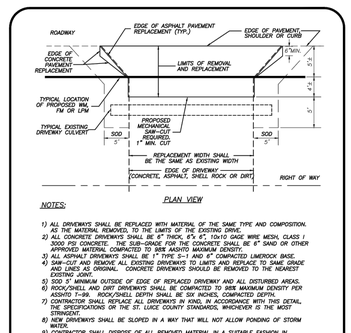
FORT PIERCE UTILITIES AUTHORITY	JACK & BORE DETAIL		M-7
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	



NOTES:
1) TRACE WIRE IS REQUIRED ON ALL PIPE AS NOTED BY UTILITIES ENGINEER
2) INCLUDE ALL COST OF MATERIAL & LABOR IN PRICE OF PIPE.
3) CONTRACTOR IS RESPONSIBLE FOR CONTINUITY OF ALL TRACE WIRE.

TRACE WIRE
(N.T.S.)

FORT PIERCE UTILITIES AUTHORITY	TRACE WIRE DETAIL		M-11
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	

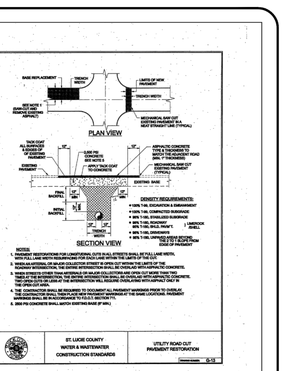


PLAN VIEW

NOTES:
1) ALL DRIVEWAYS SHALL BE REPLACED WITH MATERIAL OF THE SAME TYPE AND COMPOSITION. AS THE MATERIAL REMOVED, TO THE LIMITS OF THE EXISTING DRIVE.
2) ALL CONCRETE DRIVEWAYS SHALL BE 6" THICK, 4'x 4', 10x10 GAGE WIRE MESH, CLASS I 3000 PSI CONCRETE. SUB-GRADE FOR CONCRETE DRIVEWAYS SHALL BE 6" SAND OR OTHER APPROVED MATERIAL, COMPACTED TO 98% MAXIMUM DENSITY.
3) ALL ASPHALT DRIVEWAYS SHALL BE 1" TYPE S-1 AND 6" COMPACTED LIMEROCK BASE.
4) SAW-CUT AND REMOVE ALL EXISTING DRIVEWAYS TO LIMITS AND REPLACE TO SAME GRADE AND LINES AS ORIGINAL. CONCRETE DRIVEWAYS SHOULD BE REMOVED TO THE NEAREST EXISTING JOINT.
5) SOD 5' MINIMUM OUTSIDE OF EDGE OF REPLACED DRIVEWAY AND ALL DISTURBED AREAS.
6) ROCK/SHELL AND DIRT DRIVEWAYS SHALL BE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-99. ROCK/SHELL DEPTH SHALL BE SIX INCHES, COMPACTED DEPTH.
7) CONTRACTOR SHALL REPLACE ALL DRIVEWAYS IN KIND, IN ACCORDANCE WITH THIS DETAIL, THE SPECIFICATIONS OR THE ST. LUCIE COUNTY STANDARDS, WHICHEVER IS THE MOST STRINGENT.
8) NEW DRIVEWAYS SHALL BE SLOPED IN A WAY THAT WILL NOT ALLOW PONDING OF STORM WATER.
9) CONTRACTOR SHALL DISPOSE OF ALL REMOVED MATERIAL IN A SUITABLE FASHION IN ACCORDANCE WITH ALL CITY, COUNTY AND STATE REGULATIONS.
10) FOR ASPHALT DRIVEWAYS, THE BASE SHALL EXTEND SIX INCHES BEYOND THE ASPHALT OVERLAY.
11) ALL REPLACEMENT DRIVEWAYS SHALL BE CONSTRUCTED WITH A FOOTING PARALLEL TO THE ROADWAY. FOOTING SHALL BE A MINIMUM 8" DEEP AND 8" WIDE FOR THE ENTIRE LENGTH OF THE DRIVEWAY FRONTAGE.
12) ALL ASPHALT DRIVEWAYS SHALL BE OVERLAYED WITHIN THE LIMITS OF THE RIGHT-OF-WAY.

TYPICAL DRIVEWAY RESTORATION
N.T.S.

FORT PIERCE UTILITIES AUTHORITY	DRIVEWAY RESTORATION TYPICAL DRIVEWAY RESTORATION (COUNTY)		R-1
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE: 2010	SHEET 1 OF 1	

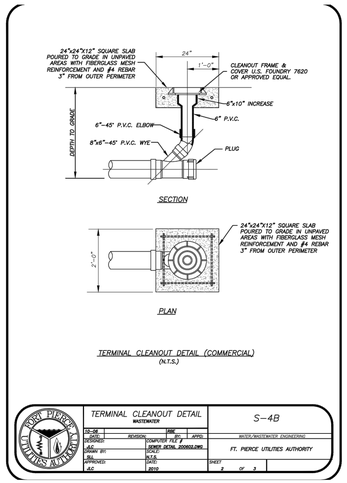


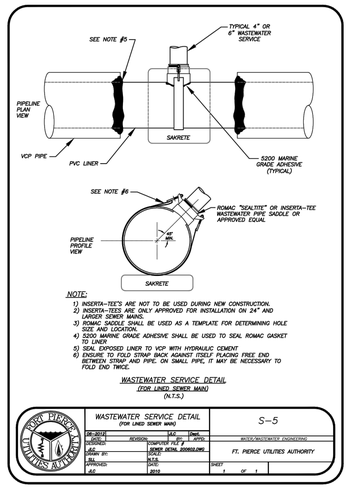
NOTES:
1. PAVEMENT RESTORATION FOR LONGITUDINAL CUTS (N.A.), STREET CUTS, DETAIL LANE WIDTH, OR TRENCH WIDTH, WHICHEVER IS GREATER, PLUS 1' ON EACH SIDE.
2. WHEN AN INTERVAL OF 48 HOUR COLLECTION EXISTS IN OPEN CUT WITHIN 1'-0" LIMITS OF THE PAVEMENT RESTORATION, THE ENTIRE INTERVAL SHALL BE RESTORED WITH CONCRETE.
3. WHEN TWO OR MORE OPEN CUTS EXISTING OR PLANNED ARE OPEN FOR MORE THAN TWO (2) TIMES OF THE INTERVAL FOR WHICH AN OPEN CUT WILL BE ALLOWED, BUT WITH A SPACING TO EACH OTHER OF LESS THAN 100 FEET, THE ENTIRE INTERVAL SHALL BE RESTORED WITH CONCRETE AT THE OPEN CUT RATE.
4. THE CONTRACTOR SHALL BE REQUIRED TO DOCUMENT ALL PAVEMENT MARKINGS PRIOR TO OVERLAY, AND SHALL REPLACE ALL REMOVED PAVEMENT MARKINGS AT THE SAME LOCATIONS. PAVEMENT MARKINGS SHALL BE IN ACCORDANCE TO F.D.O.T. SECTION 711.
5. 3000 PSI CONCRETE SHALL MATCH EXISTING RATE (IF MIN.)

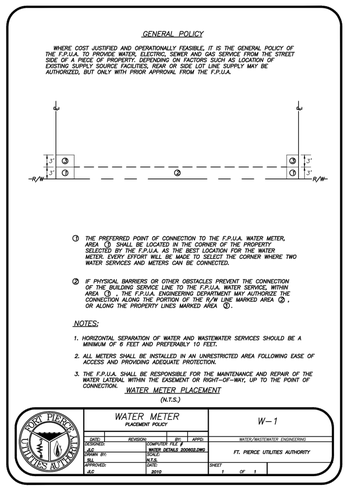
FORT PIERCE UTILITIES AUTHORITY	ST. LUCIE COUNTY WATER & WASTEWATER CONSTRUCTION STANDARDS		UTILITY ROAD CUT PAVEMENT RESTORATION
			S-13

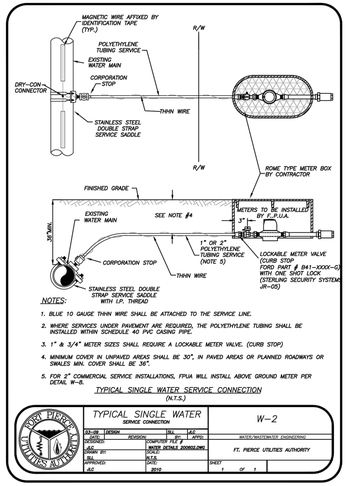
PAVEMENT RESTORATION
(COUNTY)

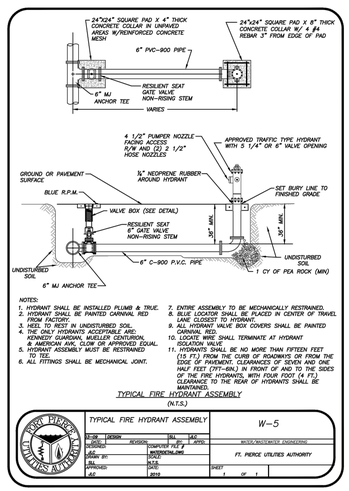
FORT PIERCE UTILITIES AUTHORITY	PAVEMENT RESTORATION (COUNTY)		R-2
DO-NOT SCALE DRAWING	DATE / REVISION / BY / APPD.		WATER/WASTEWATER ENGINEERING
DRAWN BY: AM	COMPUTER FILE # DETAIL NOTES 2006052.DWG		FT. PIERCE UTILITIES AUTHORITY
APPROVED: AM	N.T.S. DATE

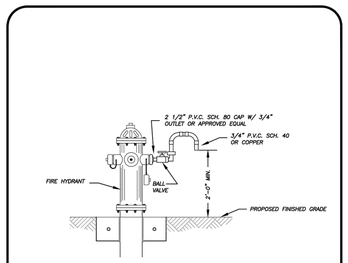


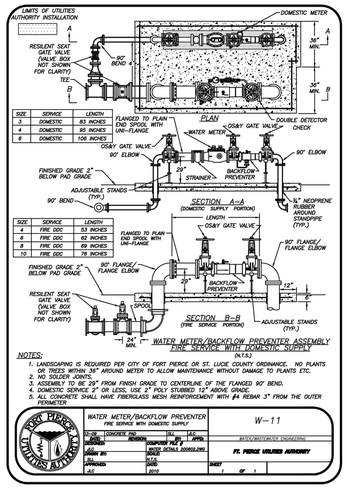


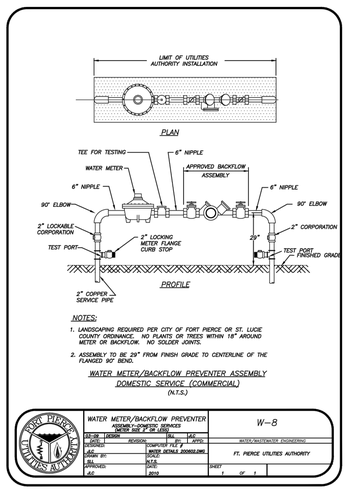


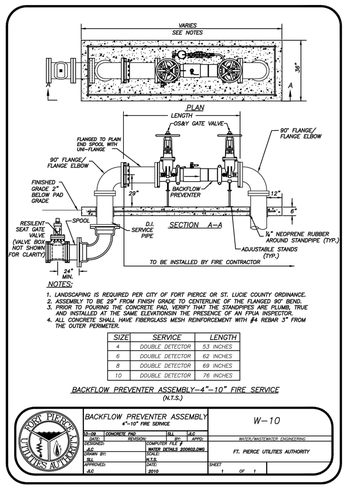


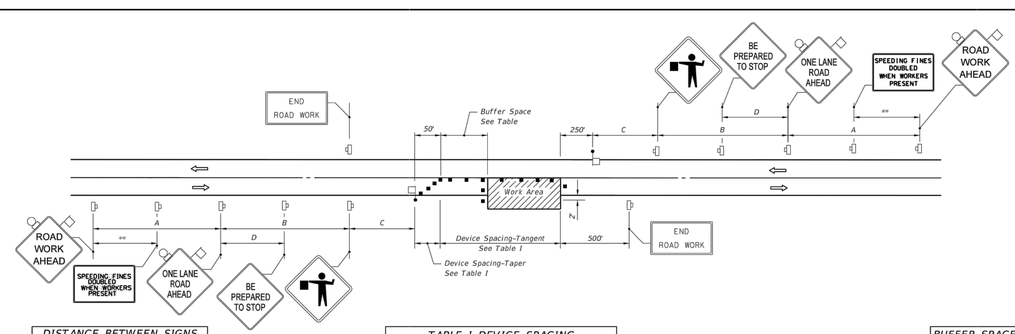












DISTANCE BETWEEN SIGNS				
Speed (mph)	Spacing (ft.)			
	A	B	C	D
40 or less	200	200	200	100
45	350	350	350	175
50	500	500	500	250
55 or greater	2640	1640	1000	500

* The ROAD WORK 1 MILE sign may be used as an alternate to the ROAD WORK AHEAD sign.

** 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

*** BE PREPARED TO STOP sign may be omitted for speeds of 45 MPH or less.

TABLE I DEVICE SPACING				
Speed (mph)	Max. Distance Between Devices (ft.)			
	Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
	Taper	Tangent	Taper	Tangent
25 to 45	20	50	20	50
50 to 70	20	50	20	100

BUFFER SPACE	
Speed (mph)	Dist. (ft.)
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730

When Buffer Space cannot be attained due to geometric constraints, the greatest attainable length shall be used, but not less than 200 ft.

SYMBOLS

- Work Area
- Sign With 18" x 18" (Min.) Orange Flag And Type B Light
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Flagger
- Automated Flagger Assistance Devices (AFAD), With Gate
- Lane Identification + Direction of Traffic

GENERAL NOTES

1. Work operations shall be confined to one traffic lane, leaving the opposite lane open to traffic.
2. Additional one-way control may be effected by the following means:
   1. Flag-carrying vehicle;
   2. Official vehicle;
   3. Pilot vehicles;
   4. Traffic signals.

   When flaggers are the sole means of one-way control, the flaggers shall be in sight of each other or in direct communication at all times.
3. The ONE-LANE ROAD signs are to be fully covered and the FLAGGER signs either removed or fully covered when no work is being performed and the highway is open to two-way traffic.
4. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TCZ Indexes.
5. The two channelizing devices directly in front of the work area and the one channelizing device directly at the end of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.
6. For Temporary Raised Rumble Strips, general TCZ requirements and additional information, refer to Index No. 600.

DURATION NOTES

1. ROAD WORK AHEAD and the BE PREPARED TO STOP signs may be omitted if all of the following conditions are met:
   a. Work operations are 60 minutes or less.
   b. Speed limit is 45 mph or less.
   c. No sight obstructions to vehicles approaching the work area for a distance equal to the buffer space.
   d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
   e. Volume and complexity of the roadway has been considered.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH THE AREA BETWEEN THE CENTERLINE AND A LINE 2' OUTSIDE THE EDGE OF TRAVEL WAY.

LAST REVISION 07/01/14	REVISIONS	DESCRIPTION:	2015 FDOT DESIGN STANDARDS	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY	INDEX NO. 603	SHEET NO. 1 of 2

SCHULKE, BITTLE & STODDARD, L.L.C.
CIVIL & STRUCTURAL ENGINEERING - LAND PLANNING - ENVIRONMENTAL PERMITTING
CERTIFICATION OF AUTHORIZATION NO.: 00006668
1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960
TEL 772/770-9622 FAX 772/770-9496 EMAIL info@sbsengineers.com

DATE	REVISION	MARK
5/29/15	REVISED PER COPP	1

DRAWING	15-053
DESIGNED	J.B.B.
DRAWN	J.B.B.
CHECKED	J.B.B.
SCALE	NTS
DATE	4/15/15

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MISCELLANEOUS DETAILS & SPECIFICATIONS

INLET PALMS

ENGINEER CERTIFICATION
- ☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
- ☐ JOHN B. BITTLE FL. REG. NO. 57396
- ☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET 13

PROJECT NO. 15-053



MARK	REVISION	DATE
1	REVISED PER COFP	5/29/15

DRAWING	15-053
DESIGNED	J.B.B.
DRAWN	J.B.B.
CHECKED	J.B.B.
SCALE	1:30
DATE	4/15/15

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AERIAL

INLET PALMS

ENGINEER CERTIFICATION
- ☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
- ☐ JODAH B. BITTLE FL. REG. NO. 57396
- ☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET
14

PROJECT NO.
15-053

Report of Survey:

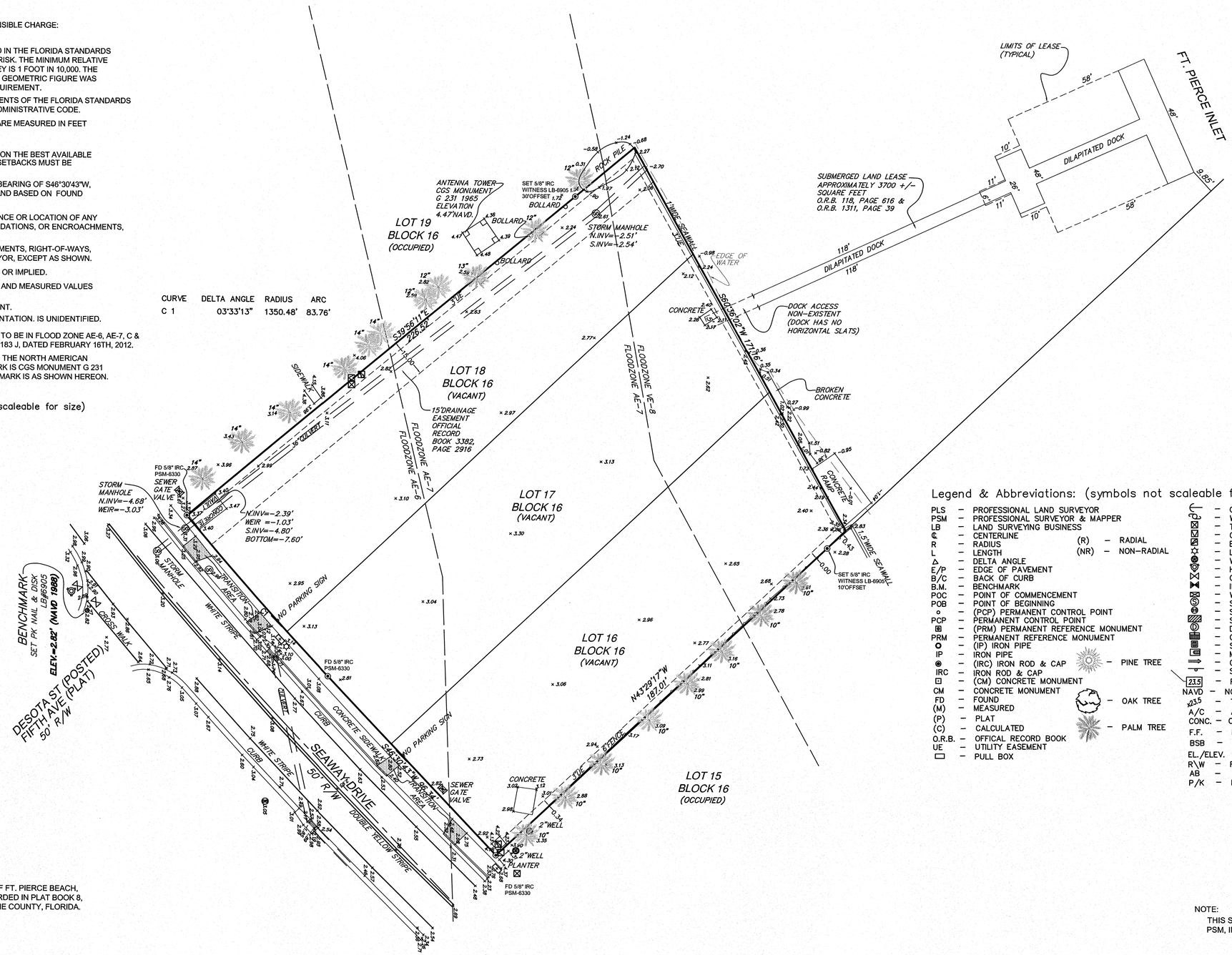
* TYPE OF SURVEY: BOUNDARY & TOPOGRAPHIC
* THIS SURVEY PERFORMED BY:

  MERIDIAN LAND SURVEYORS
  1717 INDIAN RIVER BLVD. SUITE 101
  VERO BEACH, FLORIDA 32968
* PROFESSIONAL SURVEYOR & MAPPER IN RESPONSIBLE CHARGE:

  CHARLES H. BLANCHARD P.S.M. #5755
* THE EXPECTED USE OF THE LAND, AS CLASSIFIED IN THE FLORIDA STANDARDS OF PRACTICE (5J-17, FAC) IS COMMERCIAL /HIGH RISK. THE MINIMUM RELATIVE ACCURACY FOR THIS TYPE OF BOUNDARY SURVEY IS 1 FOOT IN 10,000. THE MEASUREMENT AND CALCULATION OF A CLOSED GEOMETRIC FIGURE WAS FOUND TO BE IN EXCESS OF THIS ACCURACY REQUIREMENT.
* THIS SURVEY MEETS ALL APPLICABLE REQUIREMENTS OF THE FLORIDA STANDARDS OF PRACTICE AS CONTAINED IN 5J-17, FLORIDA ADMINISTRATIVE CODE.
* ELEVATIONS AND DIMENSIONS SHOWN HEREON ARE MEASURED IN FEET AND DECIMAL PARTS THEREOF.
* THE LAST DATE OF FIELD WORK WAS: 03/30/15
* BUILDING SETBACK LINES, IF SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION, BUT ARE NOT CERTIFIED TO. THE SETBACKS MUST BE VERIFIED PRIOR TO DESIGN OR CONSTRUCTION.
* THE BEARING BASE FOR THIS SURVEY IS A GRID BEARING OF S46°30'43"W, ALONG THE NORTH R/W LINE OF SEAWAY DRIVE AND BASED ON FOUND MONUMENTATION.
* THIS SURVEY DOES NOT CERTIFY TO THE EXISTENCE OR LOCATION OF ANY UNDERGROUND IMPROVEMENTS: UTILITIES, FOUNDATIONS, OR ENCROACHMENTS, EXCEPT AS SHOWN.
* NO INSTRUMENTS OF RECORD REGARDING EASEMENTS, RIGHT-OF-WAYS, OR OWNERSHIP WERE SUPPLIED TO THIS SURVEYOR, EXCEPT AS SHOWN.
* NO TITLE OPINION OR GUARANTEE IS EXPRESSED OR IMPLIED.
* UNLESS A COMPARISON IS SHOWN, PLAT VALUES AND MEASURED VALUES ARE THE SAME.
* LEGAL DESCRIPTION IS AS PROVIDED BY THE CLIENT.
* UNLESS OTHERWISE INDICATED, FOUND MONUMENTATION. IS UNIDENTIFIED.
* THE PARCEL OF LAND SHOWN HEREON APPEARS TO BE IN FLOOD ZONE AE-6, AE-7, C & VE-8 PER FLOOD INSURANCE RATE MAP #12111C0183 J, DATED FEBRUARY 16TH, 2012.
* THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. THE BENCHMARK IS CGS MONUMENT G 231 1965, ELEVATION 4.47' NAVD. SECONDARY BENCHMARK IS AS SHOWN HEREON.

Legend & Abbreviations: (symbols not scaleable for size)

PLS – PROFESSIONAL LAND SURVEYOR
PSM – PROFESSIONAL SURVEYOR & MAPPER
LB – LAND SURVEYING BUSINESS
℄ – CENTERLINE
R – RADIUS
L – LENGTH
Δ – DELTA ANGLE
E/P – EDGE OF PAVEMENT
B/C – BACK OF CURB
B.M. – BENCHMARK
POC – POINT OF COMMENCEMENT
POB – POINT OF BEGINNING
○ – (PCP) PERMANENT CONTROL POINT
PCP – PERMANENT CONTROL POINT
⊞ – (PRM) PERMANENT REFERENCE MONUMENT
PRM – PERMANENT REFERENCE MONUMENT
○ – (IP) IRON PIPE
IP – IRON PIPE
● – (IRC) IRON ROD & CAP
IRC – IRON ROD & CAP
⊡ – (CM) CONCRETE MONUMENT
CM – CONCRETE MONUMENT
FD – FOUND
(M) – MEASURED
(P) – PLAT
(C) – CALCULATED
– GUY WIRE
– WOOD UTILITY POLE
– TELEPHONE SERVICE
– CABLE T.V. BOX
– ELECTRIC BOX
– LIGHT POST
– WELL
– HYDRANT
– GATE VALVE
– IRRIGATION VALVE
– WATER METER
– SANITARY MANHOLE
– SANITARY SERVICE
– SEPTIC TANK
– DRAINAGE MANHOLE
– CURB INLET
– SURFACE INLET
– MITERED END SECTION
– CONCEPTUAL DRAINAGE
– STREET SIGN
23.5 – PROPOSED GRADE
NAVD – NORTH AMERICAN VERTICAL DATUM
x23.5 – TYPICAL ELEVATION
A/C – AIR CONDITIONER
CONC. – CONCRETE
F.F. – FINISH FLOOR
BSB – BUILDING SETBACK LINE
EL./ELEV. – ELEVATION
R\W – RIGHT OF WAY
AB – AS–BUILT
P/K – PARKER–KALON



Legend & Abbreviations: (symbols not scaleable for size)

PLS – PROFESSIONAL LAND SURVEYOR
PSM – PROFESSIONAL SURVEYOR & MAPPER
LB – LAND SURVEYING BUSINESS
℄ – CENTERLINE (R) – RADIAL
R – RADIUS (NR) – NON–RADIAL
L – LENGTH
Δ – DELTA ANGLE
E/P – EDGE OF PAVEMENT
B/C – BACK OF CURB
B.M. – BENCHMARK
POC – POINT OF COMMENCEMENT
POB – POINT OF BEGINNING
○ – (PCP) PERMANENT CONTROL POINT
PCP – PERMANENT CONTROL POINT
⊞ – (PRM) PERMANENT REFERENCE MONUMENT
PRM – PERMANENT REFERENCE MONUMENT
○ – (IP) IRON PIPE
IP – IRON PIPE
● – (IRC) IRON ROD & CAP – PINE TREE
IRC – IRON ROD & CAP
⊡ – (CM) CONCRETE MONUMENT
CM – CONCRETE MONUMENT – OAK TREE
FD – FOUND
(M) – MEASURED
(P) – PLAT – PALM TREE
(C) – CALCULATED
O.R.B. – OFFICAL RECORD BOOK
UE – UTILITY EASEMENT
▭ – PULL BOX

– GUY WIRE
– WOOD UTILITY POLE
– TELEPHONE SERVICE
– CABLE T.V. BOX
– ELECTRIC BOX
– LIGHT POST
– WELL
– HYDRANT
– GATE VALVE
– IRRIGATION VALVE
– WATER METER
– SANITARY MANHOLE
– SANITARY SERVICE
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BSB – BUILDING SETBACK LINE
EL./ELEV. – ELEVATION
R\W – RIGHT OF WAY
AB – AS–BUILT
P/K – PARKER–KALON

LEGAL DESCRIPTION:
LOTS 16, 17 AND 18, BLOCK 16, REVISED MAP OF FT. PIERCE BEACH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 8, PAGE 29, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

NOTE:
THIS SURVEY IS BASED ON A MAP OF SURVEY BY ALEXANDER J. PIAZZA PSM, INC. LB #7280, DATED 09-21-05, PROJECT NUMBER 05-0543.

MERIDIAN
LAND SURVEYORS
1717 INDIAN RIVER BLVD, SUITE 201
VERO BEACH, FL. 32960 LB#6905
PHONE: 772-794-1213, FAX: 772-794-1096
E-MAIL: LB6905@BELLSOUTH.NET

TYPE: BOUNDARY & TOPOGRAPHIC	REVISIONS			
PROJECT# 15-024				
DATE: 3/23/15 F.B.214 PGE.27				
DRAWN BY: C.H.B.	2.	5-29-15	REVISE TYPO'S	CHB
CHECKED BY: S.P.T.	1.	4-21-15	ADD DRAINAGE EASEMENT	CHB
SCALE: 1:20 SHEET: 1 OF 1	NO.	DATE	DESCRIPTION	BY

PLAT OF SURVEY FOR:

FOGLIA CONSTRUCTION

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR AND MAPPER NAMED BELOW.

STATE OF FLORIDA LS 6765

3/24/15

CHARLES H. BLANCHARD P.S.M. #5755

WATERFRONT TOWN HOMES

INLET PALMS

1502 SEAWAY DRIVE
FORT PIERCE, FLORIDA

SPA - 04/30/2015
SPA COMMENTS - 05/28/2015



ARCHITECT:
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(772) 766-1611 cell

Reg. No.: AA26002550
Lic. No.: AR94653

Date Signed:

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Drn:	Dwg. File:
J.L.R.	-
Chd:	Project No.:
J.L.R.	1507

Sheet No.:

A0.10

INLET PALMS - 1507



SOUTH ELEVATION BUILDINGS - 1 & 2

SCALE: 1/8" = 1'-0"



NORTH ELEVATION BUILDINGS - 1 & 2

SCALE: 1/8" = 1'-0"

Project:

WATERFRONT TOWN HOMES:
INLET PALMS
-
FORT PIERCE, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
1.	04/30/2015	SPA
2.	05/28/2015	SPA COMMENTS

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SEAL:

Drawing Title:

ELEVATIONS

Reference North

Drn: J.L.R.
Dwg. File:
Chk:
Project No.:
Sheet No.:

Reg. No.: AA26002550
Lic. No.: AR94653

A3.10

Date Signed:

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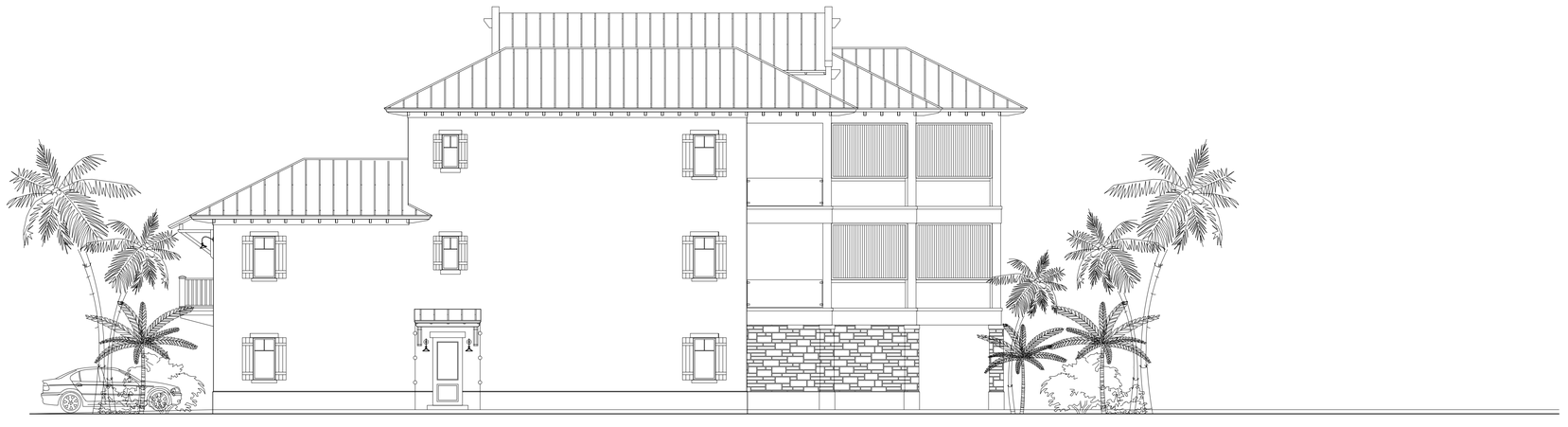
WEST ELEVATION BUILDING - 1

SCALE: 1/8" = 1'-0"



EAST ELEVATION BUILDING - 1

SCALE: 1/8" = 1'-0"

Project:

WATERFRONT TOWN HOMES:
INLET
PALMS
-
FORT PIERCE, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
1.	04/30/2015	SPA
2.	05/28/2015	SPA COMMENTS

ARCHITECT:
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(772) 770-9094 ph/fax
(772) 766-1611 cell

SEAL:

Drawing Title:

ELEVATIONS

Reference North

Drn: J.L.R.
Chk: -
Sheet No.:
Dwg. File: -
Project No.: -

Reg. No.: AA26002550
Lic. No.: AR94653

Date Signed:

A3.11

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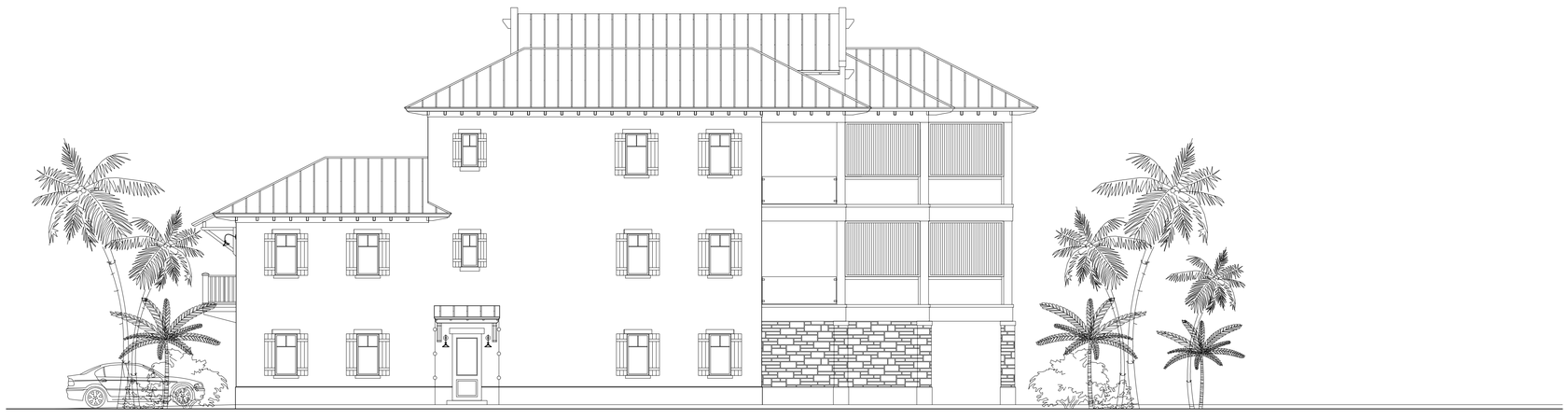
WEST ELEVATION BUILDING - 2

SCALE: 1/8" = 1'-0"



EAST ELEVATION BUILDING - 2

SCALE: 1/8" = 1'-0"

Project:

WATERFRONT TOWN HOMES:
INLET
PALMS
-
FORT PIERCE, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
1.	04/30/2015	SPA
2.	05/28/2015	SPA COMMENTS

ARCHITECT:
Atelier d'Architecture
By Jeff L. Ray, Inc.
912 22nd Place
Vero Beach, Florida 32960
(772) 770-9094 ph/fax
(772) 766-1611 cell

SEAL:

Drawing Title:

ELEVATIONS

Reference North

Drn: J.L.R.
Chk: .
Sheet No.:
Dwg. File: .
Project No.: .

Reg. No.: AA26002550
Lic. No.: AR94655

Date Signed:

A3.12

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SOUTH ELEVATION BUILDING - 3

SCALE: 1/8" = 1'-0"



NORTH ELEVATION BUILDING - 3

SCALE: 1/8" = 1'-0"



EAST ELEVATION BUILDING -3

SCALE: 1/8" = 1'-0"



WEST ELEVATION BUILDING - 3

SCALE: 1/8" = 1'-0"

Project:

WATERFRONT TOWN HOMES:

INLET PALMS

1502 SEAWAY DRIVE
FORT PIERCE, FLORIDA

Key Plan:

Issues:

No.:	Date:	Description:
1.	04/30/2015	SPA
2.	05/28/2015	SPA COMMENTS

ARCHITECT:
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SEAL:

Drawing Title:

ELEVATIONS

Reference North

Drn: J.L.R.
Chk: .
Sheet No.:
Dwg. File: .
Project No.: .

Reg. No.: AA26002550
Lic. No.: AR94653

Date Signed:

A3.13

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JOSEPH W. SCHULKE, P.E.
JODAH B. BITTLE, P.E.
WILLIAM P. STODDARD, Ph.D., P.E.

SCHULKE, BITTLE & STODDARD, L.L.C.

CIVIL & STRUCTURAL ENGINEERING • LAND PLANNING • ENVIRONMENTAL PERMITTING

April 30, 2015

Rebecca Grohall
City of Fort Pierce
Planning Department
100 N. US 1
Fort Pierce, FL 34954

Re: **Environmental Statement/Assessment**
Inlet Palms PD
Parcel ID: 2401-501-0279-000-1 and 2401-501-0279-010-4

Dear Ms. Grohall:
Schulke, Bittle & Stoddard, LLC has reviewed the following parcels depicted above in preparation of this Environmental Assessment for the impacts of the site from the zoning change of R-4A to PD.

History of the site:
The site was previously developed with a hotel named Caribbean. The hotel suffered major damage during the hurricanes. The hotel was demolished due to the damage. The current site is vacant with mostly grass and some dirt access.

Existing Zoning:
The current zoning of Hutchinson Island Medium Density Residential Zone (R-4A) is primarily for a residential use. This may be a single family dwelling, duplex, triplex, quadplex or townhome. The R-4A zoning allows for a maximum 45% lot coverage and a minimum 25% open space.

Proposed Zoning:
The proposed Zoning is Planned Development (PD). This zoning allows for flexibility in the code to satisfy the needs of the development. The submittal states that we are submitting for the same maximum 45% lot coverage and the same minimum 25% open space. The code actually allows for the PD Zone to have a 20% open space.

Impacts of the Zoning Change and the Proposed Development:
We feel that the Zoning change and Proposed Development will have no anticipated impacts to the environment for the following reasons:

1. The Zoning change and Proposed Development have the same lot coverage and open space as the existing zoning.
2. The parcels do not contain native habitat.
3. The stormwater system has the same requirements for either zoning.
4. The adjacent Fort Pierce Inlet will not be affected because both zonings will have the same open space, impervious area, and stormwater system requirements.

If you have any questions or require additional information, please feel free to contact me.

Sincerely,

Jodah B. Bittle, P.E.

1717 INDIAN RIVER BLVD., SUITE 201, VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com
Certification of Authorization No: 00008668

JOSEPH W. SCHULKE, P.E.
JODAH B. BITTLE, P.E.
WILLIAM P. STODDARD, Ph.D., P.E.

SCHULKE, BITTLE & STODDARD, L.L.C.

CIVIL & STRUCTURAL ENGINEERING • LAND PLANNING • ENVIRONMENTAL PERMITTING

April 30, 2015

Rebecca Grohall
City of Fort Pierce
Planning Department
100 N. US 1
Fort Pierce, FL 34954

Re: **Historical Report**
Inlet Palms PD
Parcel ID: 2401-501-0279-000-1 and 2401-501-0279-010-4

Dear Ms. Grohall:

Schulke, Bittle & Stoddard, LLC has reviewed the above parcels in preparation of this Historical Report as part of the application for Zoning Atlas Map Amendment.

The two vacant parcels at 1502 Seaway Drive were previously developed for use as a motel (Caribbean Hotel). Hurricanes Frances (2004) and Jeanne (2004) severely damaged the building and the structure was demolished in 2005. This land is not historically significant to the City of Ft. Pierce.

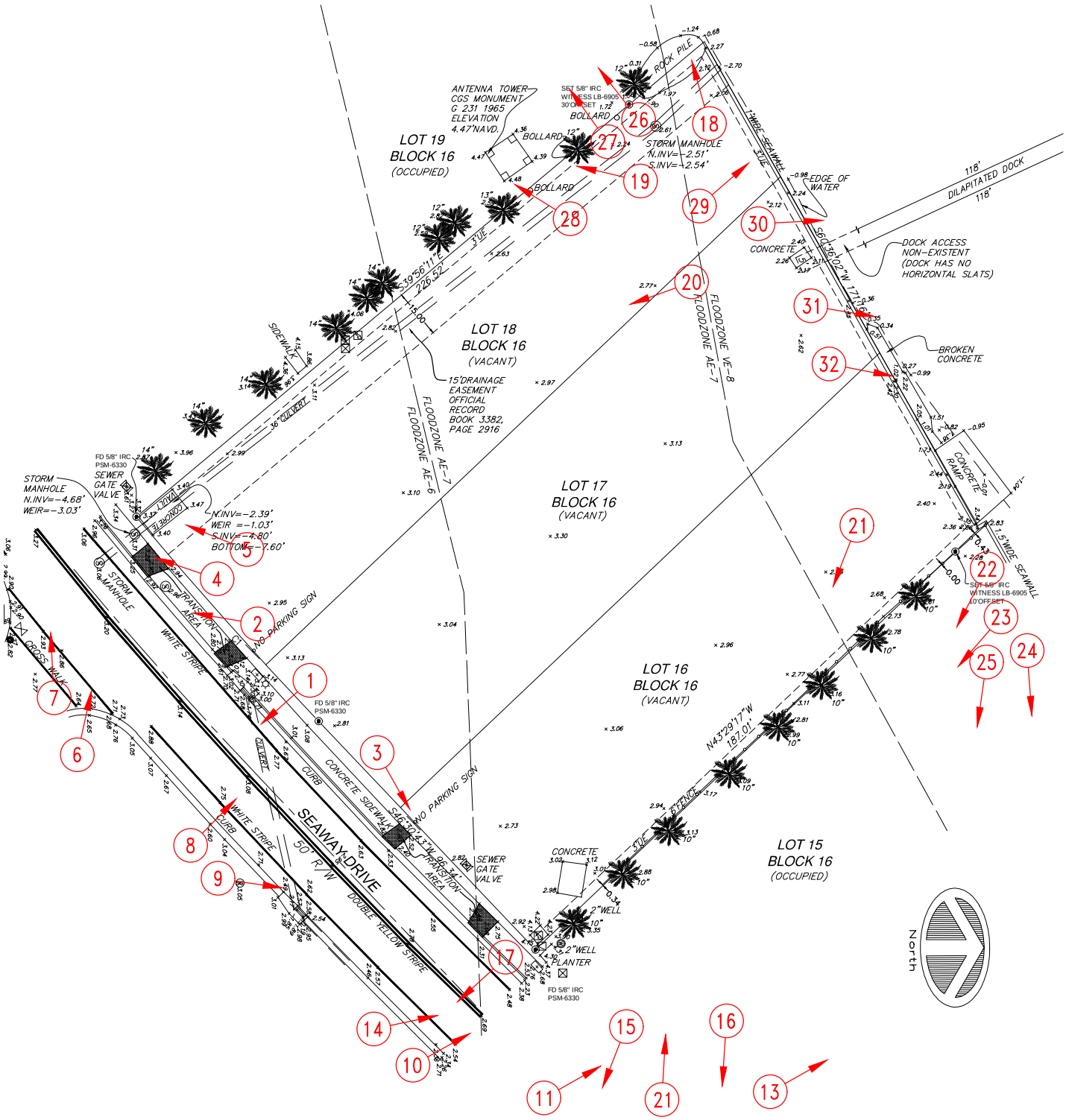
If you have any questions or require additional information, please feel free to contact me.

Sincerely,

Jodah B. Bittle, P.E.

1717 INDIAN RIVER BLVD., SUITE 201, VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com
Certification of Authorization No: 00008668

INDEX FOR PICTURE ORIENTATION



TOW-AWAY
ZONE

U.S. COAST GUARD
AUXILIARY
FLOTILLA 58
1420


U.S. COAST GUARD
AUXILIARY
FLOTILLA 68
TOW AWAY
ZONE
UNAUTHORIZED VEHICLES OR
VESSELS WILL BE TOWED
AT OWNER'S EXPENSE
SPORT'S
TOWING & STORAGE, INC.
772-467-0404

COASTAL LIVING
595-0555
U.S. COAST GUARD
AUXILIARY
FLOTILLA 84

.94 Acre FOR SALE

R-4 A

772-216-1991

SPEED
LIMIT
35


1608



JOSEPH W. SCHULKE, P.E.
JODAH B. BITTLE, P.E.
WILLIAM P. STODDARD, Ph.D., P.E.

SCHULKE, BITTLE & STODDARD, L.L.C.

CIVIL & STRUCTURAL ENGINEERING • LAND PLANNING • ENVIRONMENTAL PERMITTING

April 30, 2015

Rebecca Grohall
City of Fort Pierce
Planning Department
100 N. US 1
Fort Pierce, FL 34954

Re: Map Amendment to the Zoning Atlas Map
Inlet Palms PD
Parcel ID: 2401-501-0279-000-1 and 2401-501-0279-010-4
Drainage Analysis

Dear Ms. Grohall:

Schulke, Bittle & Stoddard, LLC has reviewed the following parcels depicted above in preparation of this Drainage Analysis as part of the application for Map Amendment to the Zoning Atlas Map.

The Map Amendment to the Zoning Atlas Map proposes changing the current zoning from Hutchinson Island Medium Density Residential Zone (R-4A) to Planned Development (PD). The Land Use will remain Hutchinson Island Residential (HIR).

Current Future Land Use: Hutchinson Island Residential (HIR):

The Hutchinson Island Residential (HIR) designation is intended for parcels that are best suited for residential development on Hutchinson Island. This future land use category allows single-family detached and attached units, duplexes and multifamily residences at densities ranging up to 8 dwelling units per acre. Limited public uses and commercial uses that are compatible with the surrounding development shall also be allowed. The previous "Medium Density Residential Hutchinson Island (RMHI)" has been renamed.

Current Zoning District:
Sec. 22-27.1. - Hutchinson Island Medium Density Residential Zone (R-4A).

(a) Purpose. It is the purpose of this section to establish height and density regulations for lands located within the city which are situated east of the Indian River. The R-4A zone is compatible with the Medium Density Residential Hutchinson Island designation in the comprehensive plan. Permitted gross residential densities in this district may not generally exceed eight (8) units per acre. Bonus density of up to one additional unit per acre is available as provided for in this section. This district is established because Hutchinson Island is a sensitive barrier island which presents development considerations which are either unique to the area or are of added concern, such as environmental fragility, beach erosion, and hurricane evacuation.

Code requirements:

a. Buildings in multifamily housing developments shall not cover more than forty-five (45) per cent of the lot area.

b. Open space is required to be a minimum of 25% of the site.

Proposed Zoning District:
Section 22-40 – Planned Development Zone (PD)

(a) Purpose. The PD Distrct is intended to provide a process for the evaluation of individually Planned Developments which are not otherwise permitted in the zoning districts established by this Chapter. The PD District is to be a voluntary process commenced by an applicant for such zoning designation. The standards and procedures of this district are intended to promote flexibility of design and permit planned diversification and integration of uses and structures, while at the same time granting the City Commision the absolute authority to establish such limitations and regulations as it deems necessary to protect the public health, safety, and general welfare. In so doing, the PD district is designed to:

A stormwater management system is required to be designed in accordance with Sections 17-27 and 17-28 of the City of Fort Pierce Code of Ordinances and is required for all site plan application submittals. It is not anticipated that the proposed change in Zoning District will have an adverse impact on the City of Fort Pierce public stormwater system for the following reasons:

1. The allowable building lot coverage under the proposed zoning district R-4A is 45%. We are proposing the same allowable lot coverage for the PD rezoning. The actual site plan shows a lot coverage of 27.6%.
2. The PD Zoning allows for a minimum of 20% open space. We are proposing the PD with a minimum of 25%. The actual submitted site plan shows open space at 28.7%.
3. The entire driving aisle, driveway, patio and sidewalks will be sand-set brick pavers.

It is reasonable to conclude that the proposed change will result in equal or less stormwater runoff than the existing zoning. In addition, it should be considered that Belmont Avenue Property, LLC granted a 15' drainage easement to the City of Fort Pierce from Seaway Drive to the mean high water line in April 2012. This benefited the City in providing an easement for a drainage outfall pipe which did not previously exist.

If you have any questions or require additional information, please feel free to contact me.

Sincerely,

Date: 4/30/15

Jodah B. Bittle, P.E.
FL. Reg. No. 57396

CITY OF FORT PIERCE

PLANNING DEPARTMENT

REBECCA GROHALL, AICP, PLANNING MANAGER
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

TO: Jodah B. Bittle, P.E.

FROM: Clarissa Davis, Planner

RE: Inlet Palms Townhomes; Zoning Atlas Amendment, Preliminary Plat & Planned Development Review

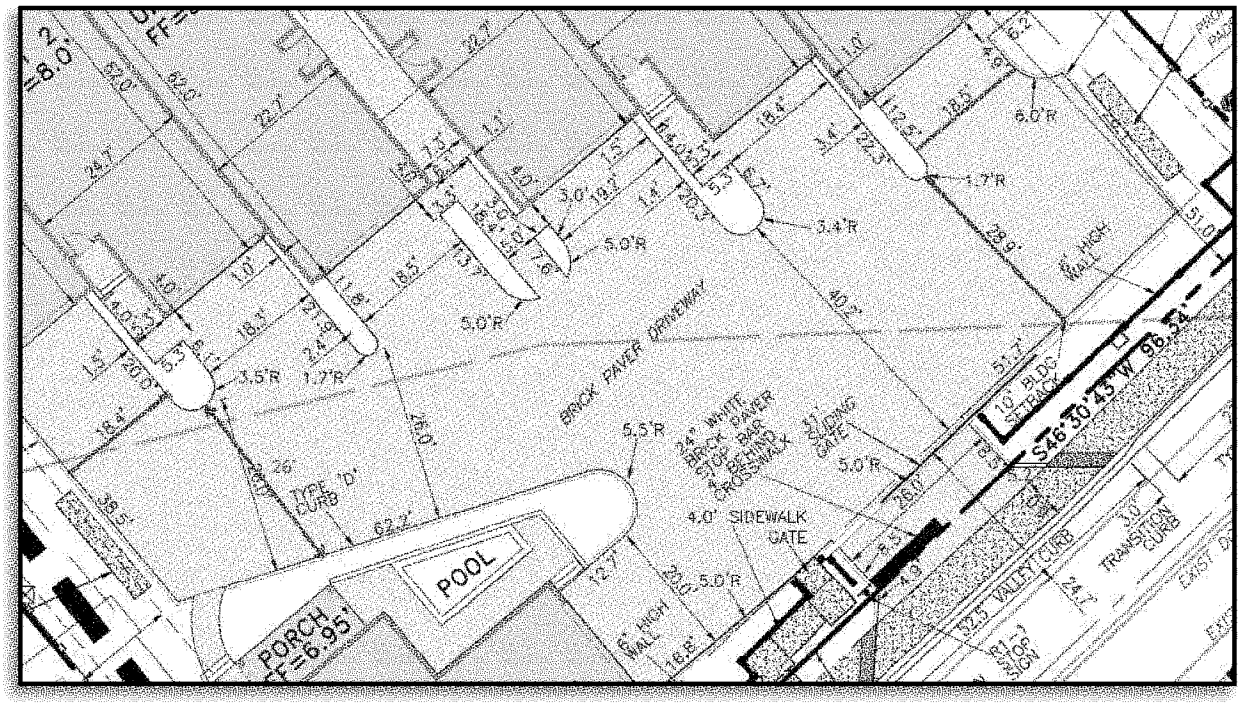
DATE: May 18, 2015

Mr. Bittle,

I have reviewed the proposed Inlet Palms project located at 1502 Seaway Drive and have produced the following comments:

1. Planned Development parameters (quantitative data) should also be in the form of a narrative. Please provide.

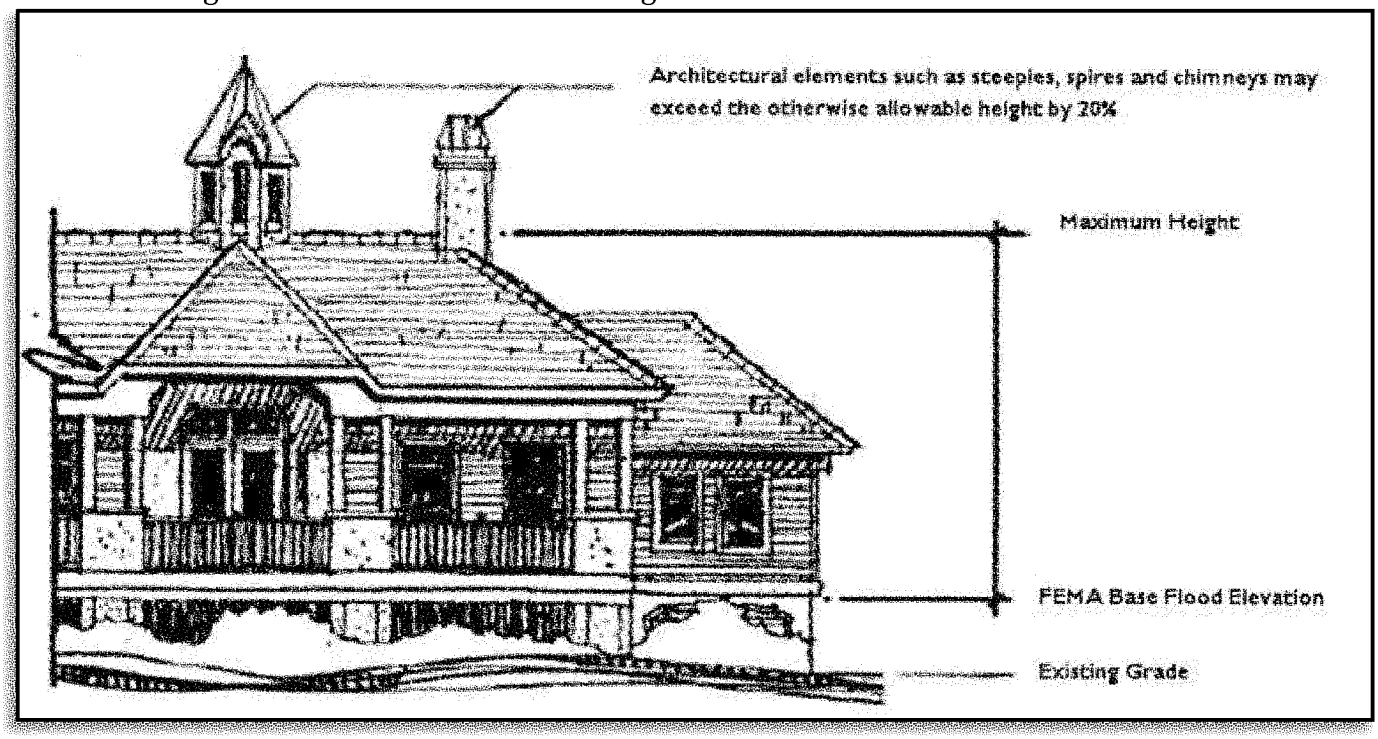
2. Open driveway area for Unit 1 has a width of 18.4' and a length of 26'. Open driveway area for Unit 6 has a width of approximately 18.5' and a length of 29'. Please coordinate with City Engineering to determine if designated area is adequate for residences backing out of garage.



3. Elevation does not clearly describe height and is also inconsistent. Please amend.

4. Height of the structure is determined from Base Flood Elevation to peak of roof. Elevations show Mean Roof Height at 50.67'. Only architectural elements such as chimneys, spires and steeples are able to exceed maximum height by 20%.

   Code Section 22-16(a)(3)(c)1 Calculation of Height: Maximum structure height shall be calculated from the established FEMA Base Flood Elevation to the highest point of the roof excluding non-habitable architectural design elements of the structure.



5. Specify pedestrian pathway from Unit 7 to dock area.

This review is merely preliminary. Official comments will be rendered at the time of building permit. If you have any questions about the review above please feel free to contact me.

Sincerely,

Clarissa Davis, Planner
(772) 467-3742
CDavis@City-FortPerice.com

From the Desk of

Marc Meyers, C.B.O.
Building Official
City of Fort Pierce
100 North U.S. 1
Post Office Box 1480
Fort Pierce, Florida 34954
T: 772-467-3000
F: 772-467-9836
MarcMeyers@city-ftpierce.com

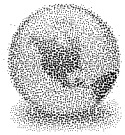
TO: Clarissa Davis, Planner

DATE: May 21, 2015

RE: Comments for TRC Meeting, May 21, 2015

As I will be unable to attend, please find my comments relating to the "New Business" planned agenda:

A. PD – Inlet Palms, 1502 Seaway Drive
- Concern of VE-AE Zones/Piles in VE, No Pile AE Invisible Line
- Fire Separations Between Buildings? Openings (windows/doors, etc.)
- Building height? 42' mean height?
- Page 7 indicates propane? Above or below grade?
- A/C pads @ 6' will/are not compliant with NFIP Flood Ordinance
- Townhome Construction/Florida Residential Code, not Building Code
- Electrical services shall be individual, no banking
- Cover page refers to Indian River, not Fort Pierce



Lawnwood Pavilion Expansion - Inlet Palms <Watchdog: Virus checked>
Martha Kerr
to:
'Clarissa Davis'
05/28/2015 08:59 AM
Hide Details
From: Martha Kerr <mkerr@fpua.com>
To: 'Clarissa Davis' <CDavis@City-FtPierce.Com>,

Good Morning Clarissa,

Below are the comments previously presented at the TRC meeting of 5/21/15 concerning Lawnwood Pavilion and Inlet Palms. On a go forward basis, I will email any comments on projects that list you as the planner directly to you.

A. **Site Plan** – Lawnwood Pavilion Expansion – 1860 N. Lawnwood - (Clarissa Davis)

- Water/Wastewater Engineering: Conceptually approved. We are working through utility layouts with the engineer and will handle during plan submittal to FPUA.
- Electric and Gas Engineering Department have reviewed the propose Technical Review application for 1850 N. Lawnwood Circle / Lawnwood Pavilion Expansion. Base on the submittal package the electric service will not be impacted. If there is a plan to increase load, we will require a riser schedule for the electric upgrade. We have no objection. Approved as noted, per TRC application submittal packages (15-07000002).
- Gas: We have gas in area if digging please call 811.

B. **PD** – Inlet Palms – 1502 Seaway Drive – (Clarissa Davis)

- Water/Wastewater Engineering: Approved- A plan review application form and 3 sets of utility plans should be submitted to FPUA Water/Wastewater engineering for a more detailed review.
- Electric and Gas Engineering Department have reviewed the propose Technical Review application for 1502 Seaway Drive / Inlet Palms. FPUA (electric) have existing infrastructure along the north side of Seaway Drive. To provide service for the proposed "Inlet Palms" development we will need to install a pad mount transformer. A 10ft wide utility easement will be required for the underground distribution line and pad mounted transformer. Please provide electrical plans for further review. We have no objection. Approved as noted

Thank you

Regards,
Martha Kerr

FPUA
Staff Assistant
W/WW Engineering Department
1701 S. 37th Street
Fort Pierce, FL 34947
Telephone: (772) 466-1600, Ext. 3473
Fax: (772) 468-2414
mkerr@fpua.com

Please note: Florida has a very broad public records law. Most written communications to or from Fort Pierce Utilities Authority employees regarding government business are public records, available to the public and media upon request. Your e-mail communications may be subject to public disclosure.

(For additional information, go to http://www.fpua.com/important_information/privacy.php)

Inlet Palms
Site Plan/Preliminary Plat
Planned Development
May 13, 2015

St. Lucie County Public Works/Engineering Comments

1. It is noted that the legal description indicated on the survey contains a typo error fT should be FT.
2. What is the source of the curve data indicated on the survey for a portion of the southerly line of the subject parcel?
3. It is noted that the "Report of Survey" indicates that the expected use is classified as commercial/high risk with a required closure of 1' in 5000'. This is not correct the closure should be stated as 1' in 10,000'.
4. It is noted that numerous proposed improvements have been indicated within the existing 15' drainage easement.
5. Preliminary plat; It is noted that the leader located in proximity to the southeasterly corner does not point to the property corner. There may be additional comments when the final plat is submitted for review.
6. It is noted that grate and invert elevation have not been indicated for the proposed modified C inlets.
7. It is noted that there were no details indicated for the proposed "Stormtech Drainage System" within the submitted plan set.
8. Thank you for the opportunity to review this project. The road abutting the project is under the jurisdiction of the City of Ft. Pierce and or FDOT. St. Lucie County Engineering has no objections to the proposed planned development.

Ron Harris, PLS
County Surveyor

CITY OF FORT PIERCE
DEPARTMENT OF ENGINEERING

Roadway Design, Engineering Reviews, Stormwater Utility Management, Project Management, Traffic Control and Maintenance

INTEROFFICE MEMORANDUM

TO: Clarissa Davis, Planner

FROM: John R. Andrews, P.E., City Engineer

SUBJECT: **Inlet Palms Planned Development & Preliminary Plat**
1502 Seaway Drive
TRC Project No. 15-43900001

DATE: May 22, 2015

cc:

Attachment(s):

This is to advise you that we have completed the review of the following documents as received May 13, 2015

- ☑ PD and Preliminary Plat
- ☐ P/D Drawings & Approved Site Plan
- ☐ Test Reports & Related Documents
- ☐ Certificate of Completion
- ☐ Record Drawings
- ☐ Permits from applicable Local, State & Federal Agencies
- ☐ Clearances from all applicable Local, State and Federal Agencies

Based on our reviews and appropriate site final inspection, we ☐ Recommend; ☑ Do Not Recommend

☑ Approval ☐ Building Permit ☐ C/O

Developer, Owner, Engineer, Contractor and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for the compliance with other City department requirements and all approved documents, as well as Local, State and Federal regulations. The development requirements for this project may necessitate additional construction requirements that are not subject to this department's review for approval.

☑ See attached for comments

P.O. BOX 1480 ◊ FORT PIERCE, FL 34954-1480 ◊ 772-467-3774

ENGINEERING COMMENTS:

1. The Preliminary Plat as submitted does not contain the required information as stipulated in the City of Fort Pierce Code of Ordinances Section 18-10. Please note; city staff will conduct the review of the Preliminary Plat at no cost to the applicant while the Final Plat will be reviewed by a registered land surveyor. All associated review fees by the surveyor will be forwarded to the applicant for payment.
2. The Site Plan shall identify the location of the call box.
3. The sliding gate shall be situated further northwest in order to provide adequate stacking room for two vehicles. No part of these vehicles shall encroach into the limits of the paved roadway.
4. The construction of a 6' high fence, masonry block retaining wall, air conditioner units, and sidewalks are proposed within the limits of the existing 15' wide drainage easement. This construction will be permitted under the condition that if at any time the City deems it necessary to access this drainage easement for drainage maintenance or drainage replacement, said improvements will be demolished and replaced at the property owner's expense.
5. The benchmark datum is noted as NAVD; please provide a conversion factor to NGVD on the plan.
6. The Paving, Grading, and Drainage Plan is a conceptual plan at this point, but the plan shall indicate whether a positive discharge is proposed, if not, the project will be required to retain 100% of the runoff generated during a 100 year – 1 day storm event. The proposed drainage system is noted as a Stormtech drainage system; please provide the appropriate construction details and technical specifications. The engineer of record shall be cognizant that all drainage systems must adhere to the requirements specified in the City of Fort Pierce Code of Ordinances Section 17-28.

JRA/tst

JOSEPH W. SCHULKE, P.E.
JODAH B. BITTLE, P.E.
WILLIAM P. STODDARD, Ph.D., P.E.

SCHULKE, BITTLE & STODDARD, L.L.C.

CIVIL & STRUCTURAL ENGINEERING • LAND PLANNING • ENVIRONMENTAL PERMITTING

June 1, 2015

Clarissa Davis, Planner
City of Fort Pierce
Planning Department
P.O. Box 1480
Fort Pierce, FL 34954-1480

Re: Inlet Palms Townhomes
Zoning Atlas Amendment, Preliminary Plat & Planned Development Review

Dear Ms. Davis:

Enclosed please find 10 sets of revised plans and the following responses to comments provided for the above referenced project:

City of Fort Pierce Planning Department (May 18, 2015)

1. Attached please find a narrative of the quantitative data for the planned development parameters.
2. The driveway areas for units 1 and 6 have been discussed with City Engineering and have been revised accordingly.
3. The elevation has been revised to clearly describe the height on the cover sheet.
4. The elevation has been revised to clearly describe the height on the cover sheet
5. As discussed, the sidewalk between units three and four is for all units and not exclusive to unit seven. Therefore, no pedestrian pathway is required from unit seven.

St. Lucie County Public Works/Engineering Comments – County Surveyor (May 13, 2015)

1. The typo in the legal description on the survey has been revised.
2. See revised survey for the Legal Description.
3. The closure is stated as 1' in 10,000' as requested.
4. The developer is aware of the issues of constructing items in the drainage easement and that it is the responsibility of the homeowners association if something is affected.
5. The southeast corner arrow has been changed.
6. The grates and elevations will be shown on the construction plans.
7. The stormtech system is not allowed by the City of Ft. Pierce and have been removed from the plans. Exfiltration trench is now being proposed.
8. Thank you for not objecting.

City of Fort Pierce Engineering Department (May 22, 2015)

1. The preliminary plat has been revised.
2. The call box is located on the site plan just south of the gate.
3. The sliding gate has been removed and the new arm gate is shown that provides better access.
4. This condition has been noted with the developer.
5. The conversion to NGVD from NAVD is noted on the cover sheet.

1717 INDIAN RIVER BLVD., SUITE 201, VERO BEACH, FLORIDA 32960
TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com
Certification of Authorization No: 00008668

6. The positive discharge note is depicted on the Paving and grading sheet. We are proposing to outfall into Seaway Drive for the south half and the existing drainage pipe along the west property line for the north portion of the site.

City of Fort Pierce Building Department (May 21, 2015)

1. The buildings are not located within the VE Zone. No piles are required.
2. Please see revised architectural plans.
3. The building height has been changed on the cover sheet.
4. The plans state under the general notes that the propane tanks in the driveways will be underground.
5. The A/C pads have been raised to 7.0'.
6. Acknowledged.
7. Acknowledged.
8. The cover page has been changed.

Fort Pierce Utility Authority – W/WW Engineering Department (May 28, 2015)

1. Acknowledged, a plan review application form and 3 sets of utility plans will be submitted directly to FPUA Water/Wastewater engineering for a more detailed review.
2. Acknowledged, a 10 ft wide utility easement has been added for the underground distribution line and pad mounted transformer in the southeast corner of the project. Electrical plans will be submitted directly to FPUA Water/Wastewater engineering for further review.

Upon your review should you have any questions or require additional information, please feel free to contact me.

Sincerely,

Jodan B. Bittle, P.E.

cc: Foglia Contracting Corp.

Planning Board **7. c.**

Meeting Date: 06/09/2015

Information

REQUESTED ACTION

Planned Development (PD) - Rocla Concrete Tie Manufacturing Plant - 600 S. 3rd Street

LOCATION

600 S 3rd Street

RESPONSIBLE STAFF

Kori Benton, Senior Planner

RECOMMENDATION

Denial of the presented plan and rezoning request.

Attachments

Staff Report
Site Aerial
Zoning Map
Future Land Use Map
Applications, Authorization, Property Records, Deeds
Rocla PD Narrative & Development Booklet
Site Survey
Site Plan
Elevations & Floor Plans
Perspective Views
Landscape Plan
Environmental Assessment
Traffic Report
Consultant Traffic Analsysis Review & Inquiry
Georgia Avenue & US Highway 1 Intersection - Autoturn and Deficiency Exhibits
Techinical Review Committee (TRC) Comment Packet
C&T TRC Comment Response Packet
COFP Noise Ordinance
Site Plan Layout
Lighting Plan
Future Land Use Element - Excerpts from the Comprehensive Plan

Form Review

Form Started By: Kori Benton Started On: 06/03/2015 11:15 AM

Final Approval Date: 06/03/2015

CITY OF FORT PIERCE

PLANNING DEPARTMENT

REBECCA GROHALL, AICP, PLANNING MANAGER
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

TO: Members of the City of Fort Pierce Planning Board

THROUGH: Rebecca Grohall, AICP, Planning Manager

FROM: Kori Benton, Senior Planner

SUBJECT: **Application for Planned Development (PD)**
Rocla Concrete Tie Manufacturing Plant
600 S 3rd Street

DATE: June 2, 2015

STAFF REPORT

Owner: FEC RR
7411 Fullerton St Ste 300
Jacksonville, FL 32256-3629

Applicant: Rocla Concrete Tie, Inc.
1819 Denver West Drive – Suite 450
Lakewood, CO 80401

Representative: Stephan Matthes, P.E.
Culpepper & Terpening, Inc.
2980 S. 25th Street
Fort Pierce, FL 34982

Requested Action: Approval of a Zoning Atlas Amendment and Planned Development (PD)

Location: 600 South 3rd Street

Parcel IDs: 2410-811-0001-030-1 & 2410-805-0005-000-1

Current Zoning: I-1, Light Industrial

Proposed Zoning: PD, Planned Development

Future Land Use: Industrial (I)

Surrounding Zoning:

North	East	South	West
I-1	C-4 / C-1/R-4	I-1	C-3/I-1

Site Size: 7.18 acres*

Utilities: Located within the FPUA Retail Service Area

Staff Analysis:

Request

In accordance with Sections 22-40, 22-59, and 22-127 of the City Code, the applicant is requesting the review and approval of a Planned Development (PD) to rezone the subject site and authorize the development of an industrial manufacturing plant. The subject property is currently zoned I-1, Light Industrial.

Project Summary

The proposed Rocla Crosstie Planned Development (PD-Rocla) is for the purpose of constructing a concrete railroad tie manufacturing facility, located on a 7.18-acre tract of land owned by the Florida East Coast Railroad (FEC), and subject to lease agreement with Rocla Concrete Tie, Inc. The proposed manufacturing facility will be located along the east side of South 3rd Street, south of the Citrus Avenue overpass, between the existing CEMEX/Rinker Concrete production plant and the existing FEC Ft. Pierce Terminal.

The proposed development plan consists of a 16,850 sq. ft. manufacturing facility, 2,625 sq. ft. support office, two concrete batch storage silos, and a large stabilized area for the storage and staging of finished product. The plan also incorporates an estimated 550 ft. railroad spur to accommodate deliveries to and from the site, vehicular parking, site lighting, landscaping, and storm water facilities to support the proposed plant. Construction is proposed for completion within a single phase, designated to commence in late August of 2015 and be completed by January 2016. The plant is intended to supply FEC with new and replacement concrete ties for existing railways as well as the proposed All Aboard Florida (AAF) railway expansion project. The proposed crosstie manufacturing facility presents a specialized operation intended to provide rail cross tie production in two, eight hour work shifts. The work shifts are presented to be from 7 AM to 3 PM and 7 PM to 3 AM. Administration staff will be present from 7 AM to 4 PM.

Existing Conditions

The subject parcel is predominantly vacant, being best described as an impacted urban site that has been left altered and defunct from previous industrial activities. The historic native ecosystem is no longer present on the site, inhibited by the previous use. The vegetation present consists primarily of Brazilian pepper trees, vines and herbaceous weeds, with cabbage palms scattered between. One Gopher Tortoise has been located, as part of the environmental review of this site, which will be relocated to a new offsite location prior to development. There are no wetlands or notable topographic features present at the subject site.

Design

The proposed architectural design is reflective of a pre-engineered metal building with various architectural embellishments to improve the mundane presentation of a sizeable industrial structure. The height of the manufacturing structure is approximately 38 ft. with the storage bin structures extending to a peak height of 45’ 7”.

The design of the facility integrates a variation of features on the primary, western façade, to create visual relief towards South 3rd Street. The features are highlighted by decorative Chippendale aluminum grilles placed across this elevation. The lower portion of the façade provides additional enhancements, however the upper portion of the structure, most visible from US Highway 1 offers minimal articulation. The exterior walls will remain predominantly painted metal panel with the application of stucco to complement the lower portion of the primary facade. The low-slope roof design is typified by the metal structure envelope. The presented fenestration for the structures offers minimal design integrity and visual interest for the primary façade, as the

entrances are all internal to the facility. The remaining elevations retain the industrial scheme of a pre-engineered building, offering no architectural interest to the Citrus Avenue right-of-way to the north. The strategic incorporation of a defined entrance, porch, and windows/shutters would enhance the building presentation and design. The design presentation does include the replacement of the existing chain-link and barbed wire fence presently securing the site. Fences and walls are an essential component of the overall design scheme, and should be appropriately integrated into the proposed design.

Access & Deliveries

Vehicular access to the proposed manufacturing facility will be from an existing two-way driveway on South 3rd Street. This entrance is the sole access for delivery vehicles and employees, further serving the adjacent CEMEX site to the north. Thirty-six (37) vehicular parking spaces (two of which are handicapped-accessible), minor motorcycle parking, and a bicycle rack are presented in front of the facility. An off-street loading space is provided within the interior of the site, amongst other protocols to accept material deliveries.

The function of the facility demands the frequent delivery of raw materials to the site for processing and fabrication of the concrete railroad ties. These materials are intended to be primarily shipped to the site via truck; however occasional production demands may necessitate rail side delivery to the facility. The FEC is proposed to construct a separate rail spur to service the Rocla site to facilitate the transport of materials into, and export of the finished product. The product from this facility is intended for heavy rail use; therefore the most feasible method of transportation is offered via the railway.

Outdoor Storage

A significant element of the development plan is an expansion storage area, approximately 3.19 acres, intended to stage finished concrete ties and provide space for loading on the support rail lines. The presented material for this area is crushed granite or a washed limerock over a filter fabric. The existing plan does not provide a landscaping or visual relief for this expansive area, which is visible from Citrus Avenue, and adjacent sites.

Stormwater Retention & Landscaping

Stormwater facilities for the additional impervious area are presented to be served by two dry retention areas located at the north and south corners of the site.

The presented landscape plan emphasizes the provision of parameter buffers along the south, east, and north portions of the site. A total of 122 new trees are proposed for planting on-site, consisting primarily of sabal palms. The palms are coupled with live oaks and gumbo limbos for a planting pattern that seeks to screen the facility from adjacent sites. A series of hedges are planned along the western boundary of the project. The design suggests that tall 3-level palm plantings are configured to frame the west building façade corners in order to scale down the verticality of the main building. It is recommended that palm species with a capacity for greater height and spread, such as coconut and washintonia palms, are considered to improve the scale and interaction of landscaping with regards to the proposed facility.

Interior vehicular use landscaping is an integral component of a development plan to enhance site aesthetics, assimilation into the surrounding environment, and provides green and open space to interrupt large areas devoted to asphalt or paved areas. The City of Fort Pierce landscaping regulations provide varying tiers of interior vehicular use area landscaping based upon the zoning designation, as follows:

I-1 & I-2 Industrial Zoning Districts	All Other Zoning Districts
At least one square foot of interior landscaping for each thirty (30) square	At least one square foot of interior landscaping for each fifteen (15)

feet of vehicular use area.	square feet of vehicular use area.

The proposed development plan currently incorporates a mere 597 sq. ft. of interior vehicular use area, based upon a represented vehicular use area of 15,466 sq. ft. and an supposition of providing at least one square foot of interior landscaping for each thirty (30) square feet of vehicular use area. The conflict identified with the presented allocation of interior landscaping is the cumulative area for "Roadways & Parking" of 53,175 sq. ft. presented by the Site Plan. This area, at the intended rate of one square foot for each thirty (30) square feet of vehicular use area, would demand a minimum of 1,772.5 sq. ft. of interior landscaping. Due to the nature of the facility, and proximity to commercial and residential districts, it is recommended that a more conservative formula for interior landscaping is considered, primarily aiming to break-up the large expanse of storage area presented within the plan.

Right-of-way, Sidewalks, & Lighting

A ten-foot (10') right-of-way dedication is incorporated along the boundary of South 3rd Street for future uses by the City of Ft. Pierce. The applicant is proposing payment in-lieu of providing a sidewalk along South 3rd Street, within this area, based upon the infrequent use and absence of direct connections within the vicinity.

Site lighting will be provided for the parking area and the perimeter of the proposed structure in accordance with City Code requirements, however the design for light fixtures within the primary parking area, and adjacent to the South 3rd Street right-of-way should be enhanced for greater consistency with the City's design review guidelines.

Traffic Impacts

The traffic impact study, accounting for the specialized operation, suggests 112 additional daily trips will be generated by the proposed project. The peak hour of operation traffic is presented by the combination of administrative staff and early shift employees with an arrival time between 6 AM and 7 AM, at a rate of 24 Vehicles Per Hour (VPH), for this period. The study suggests that the nature of the facility's operations and timing of the shift work presents negligible trips during the AM and PM peak hours of traffic on the surrounding roadway networks. The analysis presented concludes that all of the surrounding roadway segments are expected to operate at their current adopted level of service (LOS) with the additional trips.

The traffic concern identified by staff is specific to the intersection of Georgia Avenue and South US Highway 1. Presently, a right-of-way and turn radius deficiency exists which presents conflicts with truck traffic turning east onto Georgia Avenue, as well as from Georgia Avenue north or south onto US Highway 1. A turn analysis was obtained through an engineering consultant to verify and assess the experienced deficiency, which will be augmented by the addition of truck traffic proposed by the development. Exhibits from this examination are provided for further review. Staff is seeking further review and consideration of a proportionate fair-share contribution to assist in mitigating the additional impacts to the noted deficiency. The widening and improvement of this intersection will improve safety and efficiency upon this critical intersection, benefitting the commercial and industrial sites along South 3rd Street, as well as travelers upon US Highway 1. Furthermore, it is noted that the condition of South 3rd Street, and adjacent roadway links to the subject site are deteriorated and subject to further decline with the additional industrial traffic and delivery trips to the site. The impacts to the noted roadways from the subject site and adjacent uses should be further considered to account for amplified activity and prospective improvement with the subject project.

Noise & Dust

City Code Section 11-52.18 sets forth the primary noise regulations and sound level limitations. The review and enforcement of noise is measured from the real property line of the nearest receiving property based upon the time of day, and categorization of the receiving property as Residential, Commercial, or Industrial. The presented

development presents a variety of operational aspects that may generate noise from sources including, but not limited to, delivery of construction materials, manufacturing activities, transfer of finished products to storage area, and the loading of finished ties onto trains for transportation. The presented activities, hours of operation, and proximity to commercial and residential districts generate concerns regarding such negative impacts to surrounding properties.

The presented plan indicates that sound levels of the facility will remain under the perceived 70 (dBA) sound level limit; however the regulation is dependent upon the receiving property category, adjacent to the subject area. As noted, commercial and residential districts are in close proximity to the proposed development site. Additional operational details or noise violation prevention protocols should be presented to ensure compliance with established restrictions.

Furthermore, the utilization of concrete ingredients, manufacturing of concrete products and on-site transfer present concerns related to the generation of dust from the subject site. The adjacent commercial and residential uses may be negatively impacts from the prospects of dust generation and transfer. The proposed plan suggests the use of modern manufacturing techniques, and appropriate material for driveways and the stabilized storage will alleviate the concerns of dust generation, however Staff requests additional operational details or data from similar facilities to ensure prevention protocols are adequately integrated into the development plan.

Rezoning

Pursuant to City Code Section 22-131 before an amendment, including a zoning atlas change, is approved, findings will be made that the following standards are satisfied:

(1) The amendment is consistent with the comprehensive plan;
(2) The amendment will not have an adverse affect on the ability of the city to:
    a. Satisfy land and water use needs; and
    b. Meet transportation demands and provide community facilities and services; and
(3) The amendment will promote and protect the public health, safety and general welfare.

The presented rezoning, and coupled development plan present dynamics in conflict with the standards for consideration, stemming primarily from the intensity of the proposed facility and potential impacts to the surrounding commercial and residential districts.

Comprehensive Plan

The subject property is designated with an Industrial (I) future land use. The Industrial designation is intended for parcels suitable for industrial development and to promote the City's position as a major employment center. In contrast to the more intense Boundary and Heavy Industrial designations, the uses allowed under this designation include *light manufacturing and processing facilities*; storage and distribution facilities; warehousing; general and intensive commercial uses; research corporate parks, large business parks and mixed use office parks; office, retail, and service uses that provide support to employees; and compatible public, quasi-public, and special uses.

The nature, intensity, and hours of operation of the subject facility are more appropriately classified as heavy industrial and better suited for designated areas which provide an environment conducive to intensive manufacturing and industrial uses. Such designations are strategically located and oriented in a manner which minimizes impacts and negative externalities, upon neighboring districts, associated with the intensity of use. The prospects of an intense industrial use adjacent to Historic Downtown, River's Edge Historic District, and the US Highway 1 commercial corridor present elements, such as noise, odor, vibration, dust, hazardous conditions, and industrial traffic inconsistent with the Future Land Use Element of the Comprehensive Plan.

Technical Review Committee

All affected departments have reviewed the proposed Development Plan with regards to consistency with established ordinances and requirements of the City Code. Findings and comments from review by the corresponding departments, and the responses and plan amendments by the applicant are provided for consideration by the Planning Board.

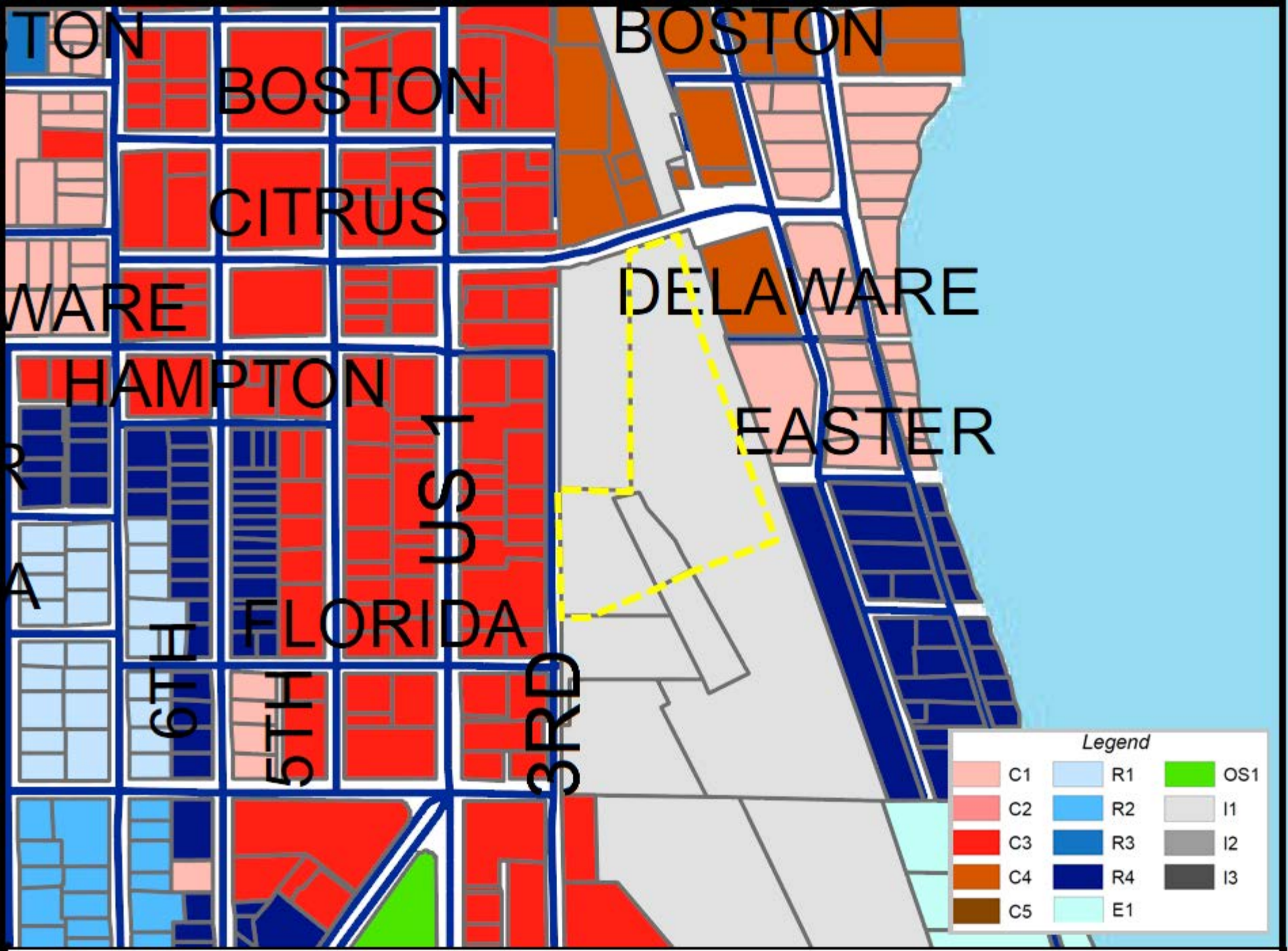
Staff Recommendation:

The proposed zoning atlas amendment and Planned Development (PD) to rezone the subject site and development an industrial manufacturing plant seeks to create a defined development plan and support facilities for the intended user upon the subject site. Code compliance issues such as the limited compliance with the City's design review guidelines, landscaping requirements, and prospective industrial traffic, noise, and dust impacts to adjacent roadways and sites encompass concerns many of the regulatory concerns of the project. Furthermore, the underlying intensity of the proposed use is not consistent Future Land Use Element of the City's Comprehensive Plan; therefore staff recommends **denial** of the presented plan and rezoning request.



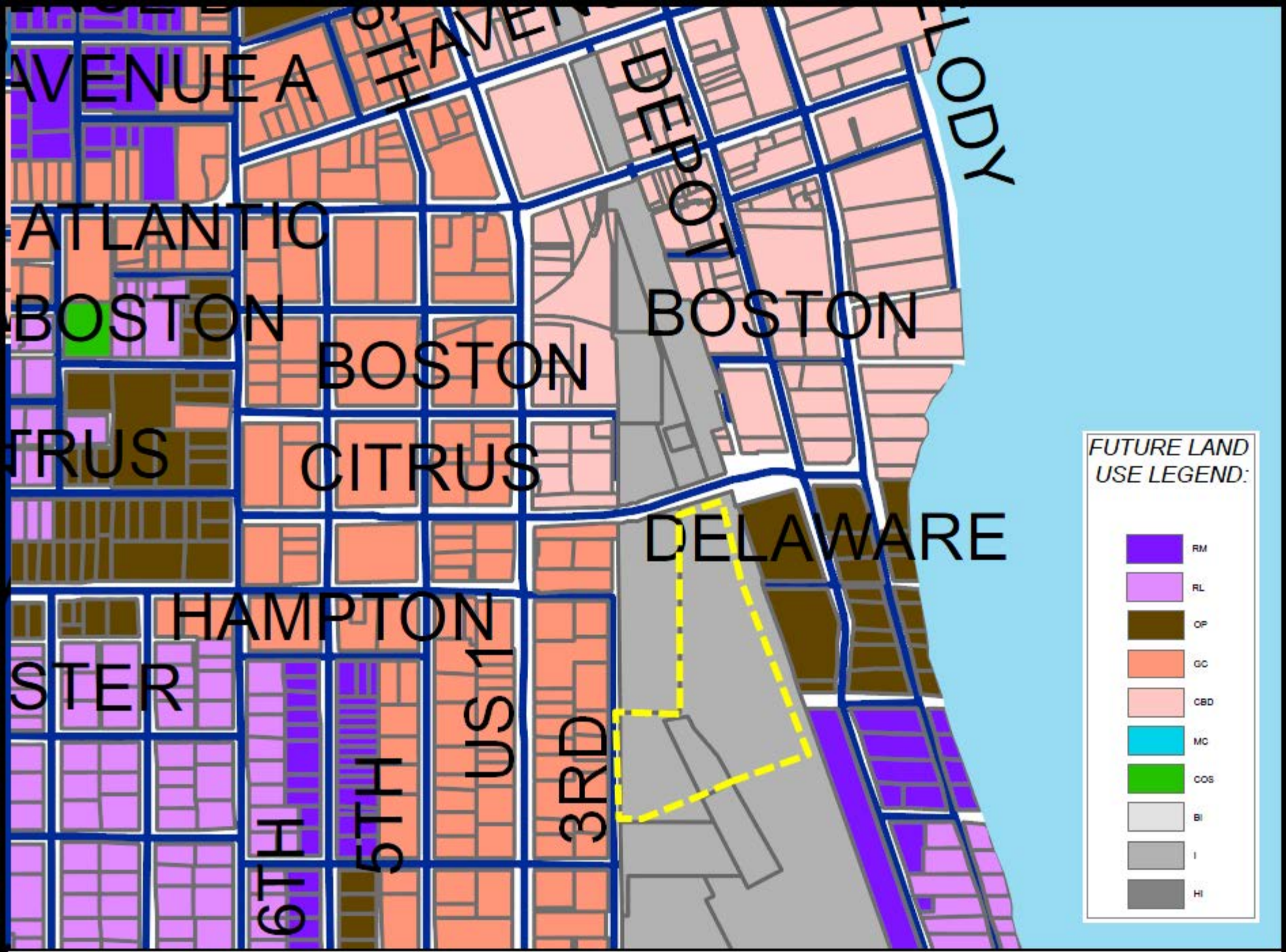
600 S 3rd Street

Site Aerial



600 S 3rd Street

Zoning Map



600 S 3rd Street

Future Land Use Map

CITY OF FORT PIERCE

PLANNING DEPARTMENT

Rebecca Grohall, AICP, Planning Manager
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

DEVELOPMENT REVIEW

Property address or Location S. 3rd St. Fort Pierce, FL 34950

Parcel ID #(s) 2410-805-0005-000-1 ; 2410-811-0001-030-1

Project description Construction of crosstie manufacturing facility on 7.55 acre site.

Florida East Coast Railway L.L.C. (FEC)	Rusty Croley, VP, Rocla Concrete Tie, Inc.
Property Owner(s)	**Applicant/Representative, Title, Company**
7411 Fullerton St. Suite 300	1819 Denver West Drive, Suite 450
Street Address	Street Address
Jacksonville FL 32256-3629	Lakewood CO 80401
City State Zip	City State Zip
—	(303) 296-3500
Phone Number	Phone Number
—	rcroley@roclatie.com
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

(SEE AGENT LETTER DATED 03/18/15)

Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY Indian River

The foregoing instrument was acknowledged before me this 24 day of March, 2015, by Rusty Croley who is personally known to me or has produced Colorado License # 02049539 as identification.

Mary Tatro

Signature of Notary

(Seal)

MARY TATRO
MY COMMISSION # EE 161062
EXPIRES: April 17, 2016
Bonded Thru Notary Public Underwriters

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____ Fees_____ Control #_____ B. Permit #_____

Intake Planner_____

Planner Assigned_____

Approved By_____ Date _____

Comments_____

Intake Date Stamp

☐ DEVELOPMENT REVIEW

General Information

- ☐ Incomplete application packets cannot be accepted.
- ☐ Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

Choose Application Type:

Application Type		
☒ Site Plan	☐ Conditional Use with New Const.	☐ Major Amendment
☐ Conceptual Development Plan		☐ Minor Amendment

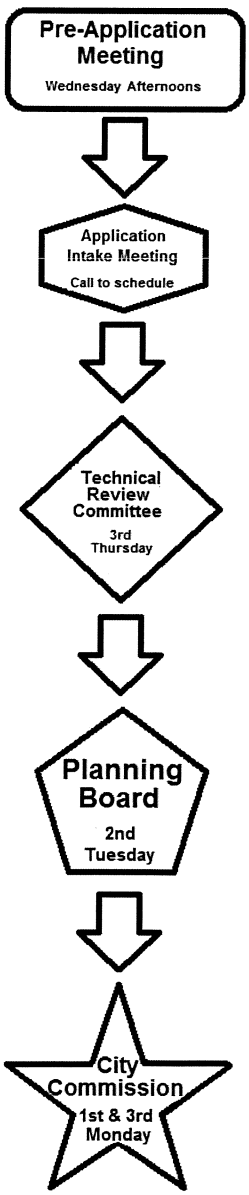
Site Information:

Non-Residential: Proposed Sq. Ft.: 328,745 Residential: Proposed Units: N/A

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

North	South	East	West
COMMERCIAL	INDUSTRIAL	RAIL ROAD	COMMERCIAL

Application Outlook



Site Plan submittal requirements:

Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- ☑ Complete notarized application
- ☑ Warranty Deed
- ☑ SLC Property Record Card
- ☑ Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- ☑ General location map (see Section 22-58.d.2)
- ☑ Survey (see Section 22-58.d.3)
- ☑ Site Plan (see Section 22-58.d.4)
- ☑ Landscaping Plan (see Section 22-187)
- ☑ Storm Drainage Plan (see Section 22-58.d.6)
- ☑ Environmental Impact Report
- ☐ Beach/Dune System protection plan, if applicable (see Section 22-58.d.7) N/A
- ☑ Lighting Plan (see Section 22-58.d.8)
- ☑ Design Review submittals (see Design Review application)
- ☑ Traffic Impact Report
- ☑ Concurrency Review submittals (see Concurrency Review application)

CITY OF FORT PIERCE

PLANNING DEPARTMENT

COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

Map Amendment

Property address or Location S. 3rd Street, Fort Pierce, FL 34950

Parcel ID #(s) 2410-805-0005-000-1; 2410-811-0001-030-1

Project description Construction of crosstie manufacturing facility on a 7.55 acre site.

Florida East Coast Railway L.L.C. (FEC)	Rusty Croley, VP, Rocla Concrete Tie, Inc.
Property Owner(s)	**Applicant/Representative, Title, Company**
7411Fullerton St. Suite 300	1819 Denver West Drive, Suite 450
Street Address	Street Address
Jacksonville FL 32256-3629	Lakewood CO 80401
City State Zip	City State Zip
—	(303)296-3500
Phone Number	Phone Number
—	rcroley@roclatie.com
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

(SEE AGENT LETTER DATED 03/18/15)

Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY INDIAN RIVER

The foregoing instrument was acknowledged before me this 24th day of MARCH, 2015, by Rusty Croley who is personally known to me or has produced Colorado License #0204953 95 as identification.

Mary Tatro

Signature of Notary

MARY TATRO
MY COMMISSION # EE 161062
EXPIRES: April 17, 2016
Bonded Thru Notary Public Underwriters

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____

Intake Planner_____

Planner Assigned_____

Approved By_____ Date _____

Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

❑ MAP AMENDMENT

Submit one (1) original & seven (7) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- ☑ Complete notarized application
- ☑ ~~As-built~~ Boundary/Topo Survey
- ☑ Warranty Deed
- ☑ Concurrency submittals
- ☑ SLC Property Record Card
- ☑ Environmental Impact Report
- ☑ Traffic Impact Report
- ☑ Support Documentation

Application Type:

- ☒ Amending the Zoning Atlas Map
- ❑ Amending the Comprehensive Plan Future Land Use Map

Site Information:

Non-Residential: Proposed Sq. Ft.: 328,745 Residential: Proposed Units: 0

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

North	South	East	West
LI	LI	RL/RM	GC

Application Outlook



CITY OF FORT PIERCE

PLANNING DEPARTMENT

COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

APPLICATION FOR DESIGN REVIEW

Project Name: Rocla Crosstie Facility

1. Project description for which design review approval is requested: Construction of of a crosstie manufacturing facility on a 7.55 acre site.

2. Property Tax I.D. #: 2410-805-0005-000-1 ; 2410-811-0001-030-1

3. Property Address: S. 3rd St. Fort Pierce, FL 34950

4. Zoning District: LI - light industrial **5.** Future Land Use: LI - light industrial

6. Historic District Y/N N if yes, which District: _____

7. Total Acreage: 7.55 acres

8. Name of Owner(s): Florida East Coast Railway L.L.C. (FEC)
Signature of Owner(s): (SEE AGENT LETTER DATED 03/18/15)
Mailing Address: (street) 7411 Fullerton st. Suite 300
(City) Jacksonville (State) FL (zip) 32256-3629
Phone # —

9. Name of Applicant: Rusty Croley, Vice President, Rocla Concrete Tie, Inc.
Signature of Applicant:
Mailing Address: (street) 1819 Denver West Drive, Suite 450
(City) Lakewood (State) CO (zip) 80401
Phone # (303) 296-3500

10. Name of Representative: Stefan K. Matthes, PE, Vice President, Culpepper & Terpening, Inc.
Signature of Representative:
Mailing Address: (street) 2980 South 25th Street
(City) Fort Pierce (State) FL (zip) 34981
Phone # (772) 464-3537 Fax (772) 464-9497
E-mail: smathes@ct-eng.com

11. Property Owners Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the site plan as described herein.

Florida East Coast Railway L.L.C. (FEC)
Property Owner's Name (Please Print) Phone

7411 Fullerton st. Suite 300, Jacksonville FL 32256-3629
Address State Zip

(SEE AGENT LETTER DATED 03/18/15) 03/24/15
Property Owner's Signature Date

STATE OF FLORIDA)
ST LUCIE COUNTY)

The foregoing instrument was acknowledged before me this 24th day of MARCH, 2015, by Rusty Crowley who is personally known to me or has produced Colorado License # 020495395 as identification.

Signature of Notary (seal)

MARY TATRO
MY COMMISSION # EE 161062
EXPIRES: April 17, 2016
Bonded Thru Notary Public Underwriters

A complete Administrative Review packet is required upon application submittal.

To be completed by the City
Date Received _____ By _____
Fee: _____ Receipt# _____

All required application information must be provided at time of submittal.
Packets must be folded to 8 ½ x 11 and collated.

APPLICATION REQUIREMENTS:

a. **Application fee**

b. **Application submission shall include the following:**

- TRC (Initial Submission): One (1) original and (13) paper copies of the application and support documents and provide one (1) electronic copy of the application packet as described below.
- Planning Board: One (1) original and (16) paper copies of the application and support documents and provide one (1) electronic copy of the application packet as described below.

DESIGN REVIEW APPLICATION CHECKLIST

(City Code of Ordinances 22-59)

1. Submittal for Administrative Review:
    1. A survey (1"=30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of Sec. 22-194, location of bordering streets and, if applicable, wetlands and beaches.
    2. A Site Analysis Study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment and other site features that may influence design elements.
    3. A draft written narrative describing the design intent of the project, its goals and objectives and how it reflects the Site Analysis Study results.
    4. Context photographs of neighboring uses and architectural styles.
    5. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the City's Planning Department.
    6. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty years of age, documentation of these structures with data from the Florida Master Site File form is also required.
    7. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
    8. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
    9. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
    10. Exterior elevations showing architectural character, external architectural features and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.

2. Submittal for Final Review:
    1. A Written Narrative describing how the project conforms to Administrative Approval and Design Review Guidelines of this section.
    2. A final site plan meeting the requirements of Section 22-58.
    3. A final site lighting plan that meets the requirements of Section 22-58(d)(8).
    4. A final landscape plan that meets the requirements of Article XII, Landscaping and Trees.
    5. Final floor plans and elevation drawings (1/8"=1'-0" minimum scale), as detailed under Administrative Approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
    6. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.

Florida East Coast
RAILWAY, L.L.C.

Francis J. Chinnici
Senior Vice President
Engineering, Mechanical
and Purchasing

March 3, 2015

TO: City of Fort Pierce;
St. Lucie County Fire District;
South Florida Water Management District
St. Lucie County Health Department

RE: Rocla Crosstie Facility

On behalf of **Florida East Coast Railway (FEC)**, we hereby authorize Rocla Concrete Tie, Inc. to act as our agent relative to agency approvals and permits for the above referenced property and project.

Florida East Coast Railway (FEC)

By: _____ FRANCIS J. CHINNICI SVP ENG, MECH & PURCHASING _____ 3-18-15
Signature Print name Title Date

STATE OF FLORIDA
COUNTY OF ST. LUCIE

The foregoing instrument was acknowledged before me this 18th day of March, 2015 by for Florida East Coast Railway (FEC), who is personally known/provided identification to me on behalf of Florida East Coast Railway (FEC).

[Notary Seal or Stamp]

_____
Notary Public-State of Florida
Print Name: Mary T. GRIFFIN
My Commission Expires: 8/20/18

MARY T GRIFFIN
MY COMMISSION #FF148473
EXPIRES August 20, 2018
(407) 398-0153 FloridaNotaryService.com

7150 Philips Highway, Jacksonville, FL 32256
904-279-3119

Rocla
Rocla Concrete Tie, Inc

March 19, 2015

TO: City of Fort Pierce;
St. Lucie County Fire District; and
South Florida Water Management District
St. Lucie County Health Department

RE: Rocla Crosstie Facility

On behalf of **Rocla Concrete Tie, Inc**, we hereby authorize Bill (Rusty) Croley of Rocla Concrete Tie, Inc. and Stefan Matthes P.E. of Culpepper & Terpening, Inc. to act as our agents relative to agency approvals and permits for the above referenced property and project.

Rocla Concrete Tie, Inc.

By: Peter Urquhart Presdent 3/19/2015
Signature Print name Title Date

STATE OF COLORADO
COUNTY OF JEFFERSON

The foregoing instrument was acknowledged before me this 19th **day of** March **, 2015 by Peter Urquhart as a registered agent, for Rocla Concrete Tie, Inc who is personally known/provided identification to me on behalf of Rocla Concrete Tie, Inc.**

[Notary Seal or Stamp]

IANA MCMORRIS
Notary Public
State of Colorado

Notary Public-State of Colorado
Print Name: Iana McMorris
My Commission Expires: 05/29/2016

1819 Denver West Drive, Suite 450
Lakewood, CO 80401
Tel (303) 296 3500
www.roclatie.com

Document must be filed electronically.
Paper documents are not accepted.
Fees & forms are subject to change.
For more information or to print copies
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E-Filed

Colorado Secretary of State
Date and Time: 11/03/2014 08:50 AM
ID Number: 20031277189

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Periodic Report

filed pursuant to §7-90-301, et seq. and §7-90-501 of the Colorado Revised Statutes (C.R.S)

ID number: 20031277189

Entity name: ROCLA CONCRETE TIE, INC.

Jurisdiction under the law of which the entity was formed or registered: Texas

1. Principal office street address:
1819 Denver West Dr.
(Street name and number)
Suite 450
Lakewood | CO | 80401
(City) | *(State)* | *(Postal/Zip Code)*
(Province – if applicable) | United States *(Country – if not US)*

2. Principal office mailing address:
(if different from above)
(Street name and number or Post Office Box information)
(City) | *(State)* | *(Postal/Zip Code)*
(Province – if applicable) | *(Country – if not US)*

3. Registered agent name: (if an individual) URQUHART (*Last*) | PETER (*First*) | A. (*Middle*) | (*Suffix*)

or (if a business organization)

4. The person identified above as registered agent has consented to being so appointed.

5. Registered agent street address:
1819 Denver West Dr.
(Street name and number)
Suite 450
Lakewood | CO | 80401
(City) | *(State)* | *(Postal/Zip Code)*

6. Registered agent mailing address:
(if different from above)
(Street name and number or Post Office Box information)
(City) | *(State)* | *(Postal/Zip Code)*
(Province – if applicable) | *(Country – if not US)*

Notice:
Causing this document to be delivered to the secretary of state for filing shall constitute the affirmation or acknowledgment of each individual causing such delivery, under penalties of perjury, that the document is the individual's act and deed, or that the individual in good faith believes the document is the act and deed of the person on whose behalf the individual is causing the document to be delivered for filing, taken in conformity with the requirements of part 3 of article 90 of title 7, C.R.S., the constituent documents, and the organic statutes, and that the individual in good faith believes the facts stated in the document are true and the document complies with the requirements of that Part, the constituent documents, and the organic statutes.

This perjury notice applies to each individual who causes this document to be delivered to the secretary of state, whether or not such individual is named in the document as one who has caused it to be delivered.

7. Name(s) and address(es) of the individual(s) causing the document to be delivered for filing:

McMahan	Desiree	M.	
(Last)	*(First)*	*(Middle)*	*(Suffix)*

1819 Denver West Dr.
(Street name and number or Post Office Box information)

Suite 450

Lakewood	CO	80401
(City)	*(State)*	*(Postal/Zip Code)*

	United States
(Province – if applicable)	*(Country – if not US)*

(The document need not state the true name and address of more than one individual. However, if you wish to state the name and address of any additional individuals causing the document to be delivered for filing, mark this box ☐ *and include an attachment stating the name and address of such individuals.)*

Disclaimer:
This form, and any related instructions, are not intended to provide legal, business or tax advice, and are offered as a public service without representation or warranty. While this form is believed to satisfy minimum legal requirements as of its revision date, compliance with applicable law, as the same may be amended from time to time, remains the responsibility of the user of this form. Questions should be addressed to the user's attorney.

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE

I, Wayne W. Williams, as the Secretary of State of the State of Colorado, hereby certify that, according to the records of this office,

ROCLA CONCRETE TIE, INC.

is an entity formed or registered under the law of **Texas** has complied with all applicable requirements of this office, and is in good standing with this office. This entity has been assigned entity identification number 20031277189.

This certificate reflects facts established or disclosed by documents delivered to this office on paper through 03/16/2015 that have been posted, and by documents delivered to this office electronically through 03/17/2015 @ 09:17:20.

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, authenticated, issued, delivered and communicated this official certificate at Denver, Colorado on 03/17/2015 @ 09:17:20 pursuant to and in accordance with applicable law. This certificate is assigned Confirmation Number 9126697.

Secretary of State of the State of Colorado

**********End of Certificate**********

Notice: A certificate issued electronically from the Colorado Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Confirmation Page of the Secretary of State's Web site, http://www.sos.state.co.us/biz/CertificateSearchCriteria.do entering the certificate's confirmation number displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate. For more information, visit our Web site, http://www.sos.state.co.us/ click Business Center and select "Frequently Asked Questions."

Property Identification

Site Address: TBD
Parcel ID: 2410-811-0001-030-1
Account #: 23916
Sec/Town/Range: 10/35S/40E
Map ID: 24/10H
Zoning: I1
Use Type: 9800
Jurisdiction: Fort Pierce

Ownership

FEC RR

7411 Fullerton St Ste 300
Jacksonville, FL 32256-3629

Legal Description

ANDREWS AND RICHARDS S/D (WEST) PART OF BLKS A AND B MPDAF: BEG AT A PT 10 FT E OF AND 268 FT SELY OFN TERMINUS OF TRACK #93, TH NELY AT RT ANG TO TRACK #93 115 FT TOPT 10 FT W OF TRACK #10, TH NWLY // WITH AND 10 FT W OF TRACK #10 283 FT, TH SWLY 82 FT, TH SELY // WITH AND 10 FT E OF TRACK #93 298 FT TO POB (0.70 AC) (MAP 24/10H)

Current Values

Just/Market:	$0	**Assessed:**	$0
Exemptions:	$0	**Taxable:**	$0

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2014	$0	$0	$0	$0
2013	$0	$0	$0	$0
2012	$0	$0	$0	$0

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
12-05-1975	0246 / 1265				$1

Total Areas

Land Size (acres):	
Land Size (SF):	
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt

This information is believed to be correct at this time but it is subject to change and is not warranted.

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Property Identification

Site Address: TBD
Parcel ID: 2410-805-0005-000-1
Account #: 23863
Sec/Town/Range: 10/35S/40E
Map ID: 24/10G
Zoning: I1
Use Type: 9800
Jurisdiction: Fort Pierce

Ownership

FEC RR

7411 Fullerton St Ste 300
Jacksonville, FL 32256-3629

Legal Description

TYLER`S S/D THAT PART OF LOTS 1-13 INCL-LESS THAT PART LEASED TO SWAIN GROVES, GEORGIA HWY EXPRESS AND ADOBE BRICK AND SUPPLY AND LESS TO RINKER MATERIALS CORP AS IN OR 391-2382 AND LESS ANDREWS AND RICHARDS S/D (WEST) AND LESS THAT PART AS IN OR 2921-900- (MAP 24/10G)

Current Values

Just/Market:	$0	**Assessed:**	$0
Exemptions:	$0	**Taxable:**	$0

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2014	$0	$0	$0	$0
2013	$0	$0	$0	$0
2012	$0	$0	$0	$0

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
12-05-1975	0246 / 1265				$1

Total Areas

Land Size (acres):	
Land Size (SF):	
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt

This information is believed to be correct at this time but it is subject to change and is not warranted.

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K J41 1700

Warranty Deed

FROM

W. J. Jones and
Margaret A. Jones

TO

Fla. East Coast RR Co.
a Corporation

Dated March 28 A. D. 1910

Filed in the office of the Clerk of the Circuit Court of the County of St. Lucie, State of Florida, on the 25 day of July A. D. 1910 and Recorded in Book 8 on page 209

J. E. Fultz
(1969) Clerk of the Circuit Court.

By S.O. Mordt D.C.

1 90

STATE OF FLORIDA,
COUNTY OF St. Lucie

KNOW ALL MEN BY THESE PRESENTS, THAT I, Margaret A. Jones wife of the above named W. J. Jones do by these presents, made and executed by me, separate and apart from my said husband, and in the presence of A. E. Penney a Notary Public of the State of Florida, acknowledge and declare that I did make myself a party to, and executed the foregoing Deed of Conveyance, for the purpose of releasing and conveying my Dower & Separate Estate in and to the lands in said conveyance therein described and granted, and that I did the same freely and voluntarily, and without any compulsion, constraint, apprehension or fear, of or from my said husband.

IN WITNESS WHEREOF, I hereunto subscribe my name and affix my seal, this 28th day of March A. D., one thousand nine hundred and Ten

[SEAL]

Notary Public

My commission expires Nov. 12 – 1911

STATE OF FLORIDA,
COUNTY OF St. Lucie

TO ALL WHOM IT MAY CONCERN: Be it known that on this 28th day of March A. D., 1910, personally appeared before me a Notary Public of the State of Florida, the above named Margaret A. Jones to me well known as the wife of W. J. Jones, and as one of the persons described in and who executed the foregoing Deed of Conveyance, who being at the time separate and apart from her husband, the said W. J. Jones did then and there make and execute the foregoing acknowledgment, her name being with her own hand subscribed, and her seal affixed in my presence.

WITNESS my hand and seal, at Fort Pierce Fla the day and year above written.

My commission expires Nov. 12 – 1911

A. E. Penney [SEAL]
Notary Public St Lucie Co Fla

STATE OF FLORIDA,
COUNTY OF St. Lucie

ON THIS DAY personally appeared before me W. J. Jones and Margaret A. Jones to me well known as the persons described in, and who executed the foregoing Deed of Conveyance, and acknowledged that they executed the same for the purpose therein expressed; whereupon it is prayed that the same may be recorded.

IN WITNESS WHEREOF, I have hereunto affixed my hand and seal, this 28th day of March A. D., 1910.

A. E. Penney [SEAL]
Notary Public

STATE OF FLORIDA
COUNTY OF ST. LUCIE

BE IT REMEMBERED, That on this 25th day of July A. D., 1910, I, J. E. FULTZ, Clerk of the Circuit Court in and for said County, have duly recorded the foregoing Deed in the Public Records of said County.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Court, the day and year above written.

J. E. Fultz [SEAL]
By R. L. Merritt D. C.

TOGETHER with all and singular the easments, rights tenements, hereditaments, and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, AND ALSO, all the estate, right, title, interest, dower and right of dower, separate estate, property, possession, claim and demand whatsoever, as well in law as in equity, of the said part ies of the first part, of, in, and to the same, and every part and parcel thereof, with the appurtenances: TO HAVE AND TO HOLD the above granted, bargained and described premises, with the appurtenances, unto the said part y of the second part, its successors ~~heirs~~ and assigns, to its and their own proper use, benefit and behoof forever.

And the said part ies of the first part for their heirs, executors, and administrators, do covenant, promise and agree to and with said part y of the second part, its successors ~~heirs~~ and assigns, that the said part ies of the first part at the time of the sealing and delivery of these presents, were lawfully seized in fee simple of a good, absolute, and indefeasible estate of inheritance, of and in, all and singular the above granted, bargained and described premises, with the appurtenances thereto and had good right, full power, and lawful authority to grant, bargain, sell, and convey the same in manner and form aforesaid. And that the said part y of the second part its successors ~~heirs~~ and assigns, shall and may at all times hereafter, peacefully and quietly have, hold, use, occupy, possess and enjoy the above granted premises, and every part and parcel thereof, with the appurtenances, without any let, suit, trouble, molestation, eviction or disturbance of the said part ies of the first part their heirs or assigns, or of any other person or persons lawfully claiming or to claim the same. And that the same are now free, clear, discharged and unincumbered of and from all former and other grants, titles, charges, estates, judgments, taxes, assessments and incumbrances of what nature and kind soever.

lawful

And the said part ies of the first part, for themselves and their heirs, the above described and hereby granted and released premises, and every part and parcel thereof, with the appurtenances, unto the said part y of the second part its successors ~~heirs~~ and assigns, against the said part y of the first part and their heirs, and against all and every person or persons whomsoever, lawfully claiming or to claim the same shall and will warrant, and by these presents forever defend.

IN WITNESS WHEREOF, the said part ies of the first part have hereunto set their hand s and seal s the day and year first above written.

Signed, Sealed and Delivered in Presence of us:

A O Penney
W M Hendry

W J Jones [SEAL]
Margaret A Jones [SEAL]

This Indenture, Made the 28th day of March

in the year of our Lord one thousand nine hundred and Ten

BETWEEN W. J. Joyner and Margaret A Joyner, His wife, of the County of St. Lucie and State of Florida

of the first part, and the Florida East Coast Railway, a corporation,

of Dade State and County of the second part,

WITNESSETH, That said part ies of the first part, for and in consideration of the sum of

Seventeen Hundred ($1700.00) Dollars,

lawful money of the United States of America to them in hand paid by the said part y or the second part, at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, have granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents do grant, bargain, sell, alien, remise, release, convey and confirm unto the said part y of the second part, and its successor ~~heirs~~ and assigns forever, all those tracts and parcels of land

lying and being in the County of St. Lucie, and State of Florida, and described as follows: Beginning at the intersection of the South line of Lot Two (2) of Tylers subdivision of Government Lot 4, Section 10, Township 35, South, Range 40 East, said Starting point being located 30 feet measured at right angles from center line of main track of the Florida East Coast Railway, and running thence northerly on said East line of right of way parallel to and 30 feet distant from said center line for 212 feet, more or less, to the North line of Lot 2 of Tylers sub-division; thence East along said North line of Lot 2 for 66 feet, more or less to a point located 62.5 feet measured at right angles from said East line of right of way; thence southerly and parallel to and 62.5 feet Easterly, measured at right angles from the East line of right of way for 212 feet more or less, to the South line of said Lot 2; thence West along the South line of said Lot 2 for 70 feet more or less to point of beginning. also all of Lot 8 of Government Lot 4 of Tylers Sub-division of said Government Lot 4, lying West of the Florida East Coast Railway's right of way, in Section 10, Township 35 South, Range 40 East, except two strips on the East end of said Lot now owned by Yancy Sundy and J. G. May.

B L 68 1200

L-68

Drew's Form R. E. 14.

Warranty Deed.

FROM

A. B. Lowery and Sadie Lowery

TO

F E C R R Co.

Dated March 23rd 1909

Filed in the office of the Clerk of the Circuit Court of the County of St Lucie State of Florida,

on the 25 day of July A. D. 1910,

and recorded in Book 8

on page 202

G. E. Fultz

Clerk of Circuit Court.

By S. O. Wardt D. C.

The H. & W. B. Drew Company, Jacksonville, Fla. 9-09-08

(1976)

ab. to S.R.E.R. 70

State of Florida,
County of St. Lucie }

KNOW ALL MEN BY THESE PRESENTS, That I, Sadie Lowery wife of the above named A.B. Lowery do by these presents, made and executed by me, separate and apart from my said husband, and in the presence of A.D. Penney, a Notary Public of the State of Florida, acknowledged and declare that I did make myself a party to, and executed the foregoing Deed of Conveyance for the purpose of conveying my Dower right & Dower and seperate estate in and to the lands in said conveyance therein described and granted, and that I did the same freely and voluntarily, and without any compulsion, constraint, apprehension or fear of or from my said husband.

IN WITNESS WHEREOF, I hereunto subscribe my name and affix my seal, this 23rd day of March A. D. one thousand nine hundred and Nine

Seal.

State of Florida,
County of St. Lucie }

TO ALL WHOM IT MAY CONCERN: Be it known that on this 23rd day of March A. D. 1909, personally appeared before me, a Notary Public of the State of Florida, the above named Sadie Lowery to me well known as the wife of A.B. Lowery and as one of the persons described in, and who executed the foregoing Deed of Conveyance, who being at the time separate and apart from her husband, the said A.B. Lowery did then and there make and execute the foregoing acknowledgment, her name being with her own hand subscribed, and her seal affixed in my presence.

WITNESS my hand and seal at Fort Pierce, Fla. the day and year above written.

My commission expires Nov. 12th 1911

A.D. Penney Seal.
Notary Public

State of Florida,
County of St. Lucie }

On this day personally appeared before me A.B. Lowery to me well known as the person described in, and who executed the foregoing Deed of Conveyance, and acknowledged that he executed the same for the purpose therein expressed, whereupon it is prayed that the same may be recorded.

IN WITNESS WHEREOF, I have hereunto affixed my hand and seal, this 23rd day of March A. D. 1909

My Commission expires Nov. 12th 1911

A.D. Penney Seal.
Notary Public

State of Florida,
County of St Lucie }

BE IT REMEMBERED, That on this 25th day of July A. D. 1910, I J. E. Fultz Clerk of the Circuit Court in and for said County, have duly recorded the foregoing Deed in the Public Records of said County.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Court, this day and year above written.

J. E. Fultz, C.C. Seal.
By R. L. Merritt D.C.

TOGETHER with all and singular the easements, rights tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; AND, ALSO, all the estate, right, title, interest, dower, and right of dower, separate estate, property possession, claim and demand whatsoever, as well in law as in equity, of the said parties of the first part, of, in and to the same, and every part and parcel thereof, with the appurtenances.

To Have and to Hold the above granted, bargained and described premises, with the appurtenances, unto the said party of the second part, its successors ~~heirs~~ and assigns, to its own proper use, benefit and behoof forever.

And the said parties of the first part for their heirs, executors and administrators, do covenant, promise and agree to and with the said party of the second part, its successors ~~heirs~~ and assigns, that the said parties of the first part at the time of the sealing and delivery of these presents, were lawfully seized in fee simple of a good, absolute and indefeasible estate of inheritance, of and in all and singular the above granted, bargained and described premises, with the appurtenances, thereto and had good right, full power and lawful authority to grant, bargain, sell and convey the same in the manner and form aforesaid. And that the said party of the second part, its successors or assigns, shall and may at all times hereafter, peacefully and quietly have, hold, use, occupy, possess and enjoy the above granted premises, and every part and parcel thereof, with the appurtenances, without any let, suit, trouble, molestation, eviction or disturbance of the said parties of the first part, their heirs or assigns, or of any other person or persons lawfully claiming or to claim the same. And that the same are now free, clear, discharged and unincumbered of and from all former and other grants, titles, charges, estates, judgments, taxes, assessments and incumbrances of what nature and kind soever.

And the said parties of the first part, for themselves and their heirs, the above described and hereby granted and released premises, and every part and parcel thereof, with the appurtenances, unto the said party of the second part, its successors ~~heirs~~ and assigns, against the said parties of the first part, and their heirs, and against all and every person or persons whomsoever, lawfully claiming or to claim the same, shall and will warrant and by these presents forever defend.

In Witness Whereof The said parties of the first part have hereunto set their hands and seals, the day and year first above written.

Signed, sealed and delivered in the presence of us:

C. D. Penney

Wiley Lowery.

A. B. Lowery (Seal)

(Seal)

WARRANTY DEED. Drew's Form R. E. 14. Printed and for sale by The H. & W. B. Drew Company, Jacksonville, Fla. 9-09-08

This Indenture, *Made the* 23rd *day of* March, *in the year of our Lord one thousand nine hundred and* Nine, *between* A.B. Lowery and Sadie Lowery his wife *of the County of* St. Lucie *and State of* Florida, *of the first part, and* The Florida East Coast Railway Company, a corporation doing business in St. Lucie County, *of the second part:* **Witnesseth,** *That the said part* ies *of the first part, for and in consideration of the sum of* Twelve Hundred ($1200.00) *Dollars, lawful money of the United States of America, to* them *in hand paid by the said part* y *of the second part at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged,* have *granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents* do *grant, bargain, sell, alien, remise, release, convey and confirm unto the said part* y *of the second part, and* its ~~heirs~~ successors *and assigns, forever, all* that lot or parcel of land *lying and being in the County of* St. Lucie *and State of* Florida *described as follows:*

all that part of Lot Seven (7) of Tylers Subdivision of Government Lot Four (4) Section Ten (10) Township Thirty-five (35) South, Range Forty (40) East, lying West of the Florida East Coast Railway's Right of Way containing Two (2) acres, more or less.

O21

O-21

Drew's Form R. E. 1.

Warranty Deed.

S. J. Owen & Wife

To

F. E. Ry Co

Date ..... 190...

ABSTRACT OF DESCRIPTION:

State of Florida,

County of St Lucie

On this 25 day of July A. D. 1900 at 2 o'clock P. M., this instrument was filed for record, and being duly acknowledged and proven, I have recorded the same on pages 124 &c. of Book 10 in the public records of said County.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Circuit Court, of the 7 Judicial Circuit of said State, in and for said County.

J. E. Fultz Clerk.

..... D. C.

The H. & W. B. Drew Company, Jacksonville, Fla. 8-26-08

(1966)

Record Verified

Abstr. Rm. 180

State of Florida }
County of Duval } ss.

I Hereby Certify, That on this 20th day of April A. D. 1910, before me ..... personally appeared S. J. Owen and Kathleen R. Owen his wife, to me known to be the persons described in and who executed the foregoing conveyance to Florida East Coast Railway Company and severally acknowledged the execution thereof to be their free act and deed for the uses and purposes therein mentioned; and the said Kathleen R. Owen the wife of the said S. J. Owen on a separate and private examination taken and made by and before me, and separately and apart from her said husband, did acknowledge that she made herself a party to the said deed of conveyance for the purpose of renouncing, relinquishing and conveying all her right, title and interest, whether of dower or of separate property, statutory or equitable, in and to the lands therein described, and that she executed said deed freely and voluntarily and without any constraint, fear, apprehension or compulsion of or from her said husband.

Witness my signature and official seal at Jacksonville, in the county of Duval and State of Florida the day and year last aforesaid.

Margaret D. Ramsey (Seal)
Notary Public State of Florida at Large
My Commission Expires April 9, 1913.

State of ..... }
County of ..... } ss.

I, an officer authorized to take acknowledgments of deeds, Hereby Certify that

.....

.....

personally known to me to be the individual described in and who executed the foregoing instrument, and that said individual this day acknowledged before me that ..... executed said instrument.

Witness my hand and official seal, this ..... day of ..... A. D. 190....

(Seal) at ..... in said County and State.

.....

.....

Together *with all and singular the* lands, easements, *tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; AND ALSO all the estate, right, title, interest, homestead, dower and right of dower, separate estate, property, possession, claim and demand whatsoever, at law and in equity, either and both, of the said part* ies *of the first part, of, in and to the same, and every part and parcel thereof; TO HAVE AND TO HOLD the above described premises, each and every, unto the said part* y *of the second part,* its successors *and assigns, in fee simple, absolute, indefeasibly, forever.*

And the said part ies *of the first part, for* themselves and their *heirs, executors and administrators, jointly and severally, covenant, promise and agree to and with the said part* y *of the second part,* its successors, ~~administrators~~ *and assigns, that the said part* ies *of the first part, at the time of the sealing and delivery of these presents,* are *lawfully seized in fee simple of a good, absolute and indefeasible estate of inheritance of and in all and singular the above described premises, each and every, and* have *good right, full power and lawful authority to convey the same in manner and form aforesaid; that the said part* y *of the second part,* its successors *and assigns, shall and may, at all times hereafter, peaceably and quietly have, hold, use, occupy, possess and enjoy the above described premises, and every part and parcel thereof, without any let, suit, trouble, molestation, eviction or disturbance of the said part* ies *of the first part,* their *heirs or assigns, or of any other person or persons lawfully claiming or to claim the same; that the same, all and singular, are free, clear, discharged and unincumbered of and from all former and other titles, clouds and incumbrances of what nature and kind soever; that the said part* ies *of the first part,* their *heirs, executors and administrators, each and every, shall make, execute and acknowledge such further and other deeds and assurances as by counsel learned in the law may be considered reasonably proper to effectuate the full intent and meaning of this instrument.*

And the said part ies *of the first part, for* themselves *and* and their *heirs, the above described premises, and every part and parcel thereof, unto the said part* y *of the second part,* its successors *and assigns, against the said part* ies *of the first part, and* their *heirs, and against all and every person or persons whomsoever lawfully claiming or to claim the same shall and will warrant and by these presents forever defend.*

This alienation is with the joint consent of husband and wife, where that relation exists.

In Witness Whereof, *the said part* ies *of the first part* have *hereunto set* their *hand*s *and seal*s *each in the presence of two subscribing witnesses.*

Signed, sealed and delivered in presence of us:

Maynard D. Ramsey
Nathaniel Washington

L. J. Owen (Seal)
Kathleen R Owen (Seal)
(Seal)
(Seal)

WARRANTY DEED. Drew's Form R. E. 1. Printed and for sale by The H. & W. B. Drew Company, Jacksonville, Fla. 8-26-08.

This Warranty Deed of Conveyance,

Executed this 20th *day of* April *in the year of our Lord one thousand nine hundred and* ten (1910) *BY AND BETWEEN* S. J. Owen and wife Kathleen-R. Owen, parties

of the first part, and Florida East Coast Railway Company, a Florida corporation, doing busines in the State of Florida and the County of St. Lucie. *of the second part,*

Witnesseth, *That the said part* ies *of the first part, for and in consideration of the sum of* One thousand Nine hundred fifty ($1950.00) *DOLLARS lawful money of the United States of America, to* them *in hand paid by the said part* y *of the second part, at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, by these presents* do *give, grant, bargain, sell, alien, enfeoff, remise, release, convey and confirm unto the said part* y *of the second part and* its successors ~~xx~~ *that certain property in the County of* St. Lucie *and State of* Florida, *described as follows:* Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 22; of Owen's Addition to Fort-Pierce, St. Lucie, County, Florida, accrding to the plat recorded on the 23rd day of February, 1909, in plat book 1 at page 25, public rec rds of St. Lucie County, Florida. Said property being and comprising all that part lying west of the Florida East Coast Railway of Lot 5, and north 175 feet of lot 6 of Tylers subdivision of lot 4, Section 10, Township 35 South of range 40 east.

Subject however to a certain mortgage for the sum of $250.00 given on the 22nd day of April, 1909 by the said parties of the first part to J. S. Smart, which said mortgage the said second party herein assumes and agrees to pay.

It being the intention hereby to convey the same land as that conveyed to the said S. J. Owen by deed from J. S. Smart and wife, dated April 12, 1909, and recorded in Book 6 of deeds, at page 320, Brevard County Records, and the same property as that conveyed to said J. S. Smart by William F. Richards and others by deed dated October 29, 1901, and recorded in Book "KK" at page 221, Brevard County Records.

Also hereby conveying all right, title and interest, reversionary and otherwise, in and to all streets which appear on the plat of Owen's Addition to Fort Pierce, as recorded in Book 1, at page 25, February 23, 1909, and by any other plat affecting said lots, with the right to said Railway Company to close and occupy any and all such streets.

S. J. Owen

ROCLA CROSSTIE FACILITY
Ft. Pierce, Florida

PETITION OF
ROCLA CONCRETE TIE, INC.,
FOR A CHANGE IN ZONING
FROM I1 (LIGHT INDUSTRIAL)
TO PD (PLANNED DEVELOPMENT)
FOR PROPERTY LOCATED IN FT. PIERCE, FLORIDA

For

Rocla®
Rocla Concrete Tie, Inc

Prepared by:

CULPEPPER & TERPENING, INC
CONSULTING ENGINEERS | LAND SURVEYORS
2980 SOUTH 25TH STREET FT. PIERCE, FL 34981
(772) 464-3537 · FAX (772) 464-9497 · ct-eng.com

May 27, 2015

FTP Project Number: 15-42000001

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SECTION I

PROJECT DESCRIPTION

The proposed *Rocla Crosstie Planned Development District* (PD-Rocla) is for the purpose of constructing a concrete railroad tie manufacturing facility, that will be located on a 7.18 acre tract of land owned by the Florida East Coast Railroad (FEC) (Parcel ID 2410-805-0005-000-1 (part of) and 2410-811-0001-030-1), and subject to lease agreement with Rocla Concrete Tie, Inc. The proposed manufacturing facility will be located along the east side of South 3rd Street, just south of the Citrus Avenue overpass, between the existing CEMEX/Rinker Concrete production plant and the existing FEC Ft. Pierce Terminal.

The proposed site will be situated such that the buildings will occupy the southwest section of the property, with the eastern portion of the property, the area adjacent to the FEC rail tracks, used for the short term storage of completed rail crosstie product. The completed rail ties will be shipped from the Rocla facility, via the FEC rail tracks, to service locations throughout the Southeast United States.

The subject parcel can be best described as being, an impacted urban site that has been altered from previous activity. The site has been previously disturbed and there are no remaining native ecosystems on the site. There are no wetlands or significant topographic features on the subject site.

The proposed manufacturing buildings will be prefabricated, metal buildings, with an aesthetic façade along its western exposures. This primary manufacturing building will house all of the mechanical components of the manufacturing process and will be soundproofed to ensure compliance with the City's noise control regulations. There will also be a small office building that will accommodate the administrative support services for this new manufacturing activity. The manufacturing building will have an overall dimension of 90' wide by 220' long, and will have a maximum height of 38' at its peak. The maximum height of the materials storage bin is 50 feet.

Raw materials will be primarily shipped to the project site via truck, however from time to time and depending on production needs, rail side delivery may also be used. The FEC will construct/upgrade a separate rail spur to the Rocla site, specifically for the limited transport of materials into and export/shipping out of the final product. The finished product from this facility is intended for heavy rail use and the most effective way to transport this material to the various localities where they are needed is, by rail. Vehicular access to the proposed manufacturing facility will be from an existing driveway along/onto South 3rd Street. This existing turnouts and driveway widths are adequate to provide access for large vehicles entering and exiting the site.

The proposed development site will provide the required setbacks for the proposed activity. The perimeter will be landscaped as required by the City Codes. The proposed administrative office structure will be landscaped with palms and foundation hedging.

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SECTION II

PETITION FOR
CHANGE IN ZONING
TO PLANNED DEVELOPMENT (PD)
ZONING DISTRICT

[GO TO NEXT PAGE]

CITY OF FORT PIERCE

PLANNING DEPARTMENT

COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

Map Amendment

Property address or Location S. 3rd Street, Fort Pierce, FL 34950 600 South 3rd

Parcel ID #(s) 2410-805-0005-000-1; 2410-811-0001-030-1

Project description Construction of crosstie manufacturing facility on a 7.55 acre site.

Florida East Coast Railway L.L.C. (FEC)
Property Owner(s)
7411Fullerton St. Suite 300
Street Address
Jacksonville FL 32256-3629
City State Zip
—
Phone Number
—
Email Address

Rusty Croley, VP, Rocla Concrete Tie, Inc.
Applicant/Representative, Title, Company
1819 Denver West Drive, Suite 450
Street Address
Lakewood CO 80401
City State Zip
(303)296-3500
Phone Number
rcroley@roclatie.com
Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

(SEE AGENT LETTER DATED 03/18/15)
Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY Indian River

The foregoing instrument was acknowledged before me this 24th day of March, 2015, by Rusty Croley who is personally known to me or has produced Colorado License #020495395 as identification.

Signature of Notary

MARY TATRO
MY COMMISSION # EE 161062
EXPIRES: April 17, 2016
Bonded Thru Notary Public Underwriters

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____
Intake Planner_____
Planner Assigned_____
Approved By_____ Date _____
Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

100 N. U.S. 1 ◊ P.O. Box 1480 ◊ Fort Pierce, FL 34954-1480 ◊ 772-467-37290 ◊ Fax 772-466-5808
WWW.CITYOFFORTPIERCE.COM

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

☐ MAP AMENDMENT

Submit one (1) original & seven (7) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- ☑ Complete notarized application
- ☑ ~~As-built~~ Boundary/Topo Survey
- ☑ Warranty Deed
- ☑ Concurrency submittals
- ☑ SLC Property Record Card
- ☑ Environmental Impact Report
- ☑ Traffic Impact Report
- ☑ Support Documentation

Application Type:

- ☒ Amending the Zoning Atlas Map
- ☐ Amending the Comprehensive Plan Future Land Use Map

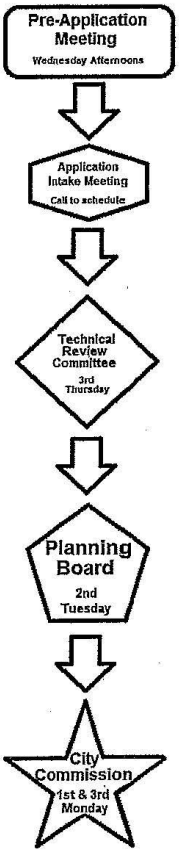
Site Information:

Non-Residential: Proposed Sq. Ft.: 328,745 Residential: Proposed Units: 0

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

North	South	East	West
LI	LI	RL/RM	GC

Application Outlook



PETITION FOR CHANGE IN ZONING
TO PLANNED DEVELOPMENT (PD) ZONING DISTRICT
ROCLA CONCRETE

LEGAL DESCRIPTION

Being a parcel of land lying in Section 10, Township 35 South, Range 40 East, St. Lucie County, Florida, being more particularly described as follows;

Commence at the intersection of the Easterly extension of the South line of Boston Avenue and the East right-of-way line of South 3rd Street (a 40.00 foot wide right-of-way); thence South along said East right-of-way line a distance of 1015 feet to the POINT OF BEGINNING of the following described parcel;

Thence South 89°27'08" East, a distance of 213.12 feet; thence North 00°18'18" West, a distance of 716.50 feet; thence North 72°26'59" East, a distance of 108.50 feet; thence South 10°14'45" East, a distance of 158.70 feet; thence South 18°46'28" East, a distance of 779.10 feet; thence South 65°40'12" West, a distance of 565.38 feet; thence North 89°43'59" West, a distance of 73.73 feet to the East right-of-way line of South 3rd Street; thence North 00°25'42" West, along said East right-of-way line, a distance of 379.25 feet to the POINT OF BEGINNING.

PARCEL ID NUMBERS

2410-805-0005-000/1 (pt of)
2410-811-0001-030/1

SITE ACERAGE: 7.18 acres

Property Identification

Site Address: TBD
Parcel ID: 2410-811-0001-030-1
Account #: 23916
Sec/Town/Range: 10/35S/40E
Map ID: 24/10H
Zoning: I1
Use Type: 9800
Jurisdiction: Fort Pierce

Ownership

FEC RR

7411 Fullerton St Ste 300
Jacksonville, FL 32256-3629

Legal Description

ANDREWS AND RICHARDS S/D (WEST) PART OF BLKS A AND B MPDAF: BEG AT A PT 10 FT E OF AND 268 FT SELY OFN TERMINUS OF TRACK #93, TH NELY AT RT ANG TO TRACK #93 115 FT TOPT 10 FT W OF TRACK #10, TH NWLY // WITH AND 10 FT W OF TRACK #10 283 FT, TH SWLY 82 FT, TH SELY // WITH AND 10 FT E OF TRACK #93 298 FT TO POB (0.70 AC) (MAP 24/10H)

Current Values

Just/Market:	$0	**Assessed:**	$0
Exemptions:	$0	**Taxable:**	$0

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2014	$0	$0	$0	$0
2013	$0	$0	$0	$0
2012	$0	$0	$0	$0

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
12-05-1975	0246 / 1265				$1

Total Areas

Land Size (acres):	
Land Size (SF):	
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt

This information is believed to be correct at this time but it is subject to change and is not warranted.

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Property Identification

Site Address: TBD
Parcel ID: 2410-805-0005-000-1
Account #: 23863
Sec/Town/Range: 10/35S/40E
Map ID: 24/10G
Zoning: I1
Use Type: 9800
Jurisdiction: Fort Pierce

Ownership

FEC RR

7411 Fullerton St Ste 300
Jacksonville, FL 32256-3629

Legal Description

TYLER'S S/D THAT PART OF LOTS 1-13 INCL-LESS THAT PART LEASED TO SWAIN GROVES, GEORGIA HWY EXPRESS AND ADOBE BRICK AND SUPPLY AND LESS TO RINKER MATERIALS CORP AS IN OR 391-2382 AND LESS ANDREWS AND RICHARDS S/D (WEST) AND LESS THAT PART AS IN OR 2921-900- (MAP 24/10G)

Current Values

Just/Market:	$0	**Assessed:**	$0
Exemptions:	$0	**Taxable:**	$0

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2014	$0	$0	$0	$0
2013	$0	$0	$0	$0
2012	$0	$0	$0	$0

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
12-05-1975	0246 / 1265				$1

Total Areas

Land Size (acres):
Land Size (SF):
Total Building Count: 1

Special Features and Yard Items

Type	Qty	Units	Year Blt

This information is believed to be correct at this time but it is subject to change and is not warranted.

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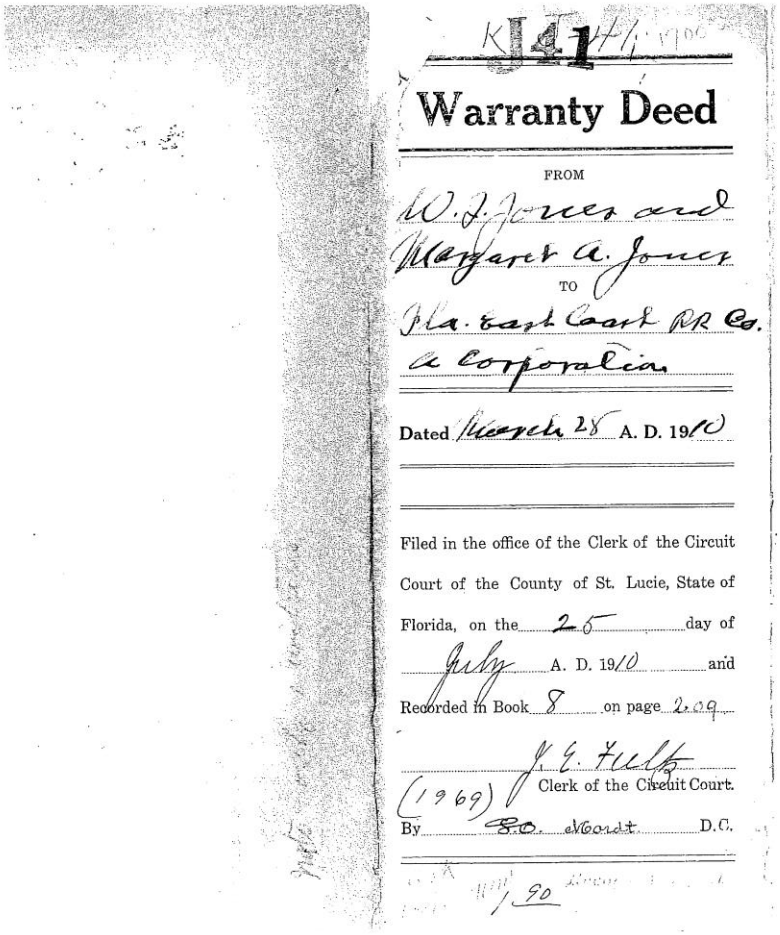


K 141

Warranty Deed

FROM

W. J. Jones and
Margaret A. Jones

TO

Fla. East Coast RR Co.
a Corporation

Dated March 28 A. D. 1910

Filed in the office of the Clerk of the Circuit Court of the County of St. Lucie, State of Florida, on the 25 day of July A. D. 1910 and Recorded in Book 8 on page 209

J. E. Fultz
(1969) Clerk of the Circuit Court.

By S.O. Mordt D.C.

1 90

STATE OF FLORIDA,
COUNTY OF St. Lucie

KNOW ALL MEN BY THESE PRESENTS, THAT I, Margaret A. Jones wife of the above named W. L. Jones do by these presents, made and executed by me, separate and apart from my said husband, and in the presence of A. H. Penney a Notary Public of the State of Florida, acknowledge and declare that I did make myself a party to, and executed the foregoing Deed of Conveyance, for the purpose of releasing and conveying my Dower & separate Estate in and to the lands in said conveyance therein described and granted, and that I did the same freely and voluntarily, and without any compulsion, constraint, apprehension or fear, of or from my said husband.

IN WITNESS WHEREOF, I hereunto subscribe my name and affix my seal, this 28th day of March A. D., one thousand nine hundred and ten

[SEAL]
Notary Public
My commission expires Nov. 12 – 1911

STATE OF FLORIDA,
COUNTY OF St. Lucie

TO ALL WHOM IT MAY CONCERN: Be it known that on this 28th day of March A. D., 1910, personally appeared before me a Notary Public of the State of Florida, the above named Margaret A. Jones to me well known as the wife of W. L. Jones and as one of the persons described in and who executed the foregoing Deed of Conveyance, who being at the time separate and apart from her husband, the said W. L. Jones did then and there make and execute the foregoing acknowledgment, her name being with her own hand subscribed, and her seal affixed in my presence.

WITNESS my hand and seal, at Fort Pierce Fla the day and year above written.

[SEAL]
My commission expires Nov. 12 – 1911
Notary Public St Lucie Co Fla

STATE OF FLORIDA,
COUNTY OF St. Lucie

ON THIS DAY personally appeared before me W. L. Jones and Margaret A. Jones to me well known as the persons described in, and who executed the foregoing Deed of Conveyance, and acknowledged that they executed the same for the purpose therein expressed; whereupon it is prayed that the same may be recorded.

IN WITNESS WHEREOF, I have hereunto affixed my hand and seal, this 28th day of March A. D., 1910

[SEAL]
Notary Public

STATE OF FLORIDA
COUNTY OF ST. LUCIE

BE IT REMEMBERED, That on this 25th day of July A. D., 1910, I, J. E. FULTZ, Clerk of the Circuit Court in and for said County, have duly recorded the foregoing Deed in the Public Records of said County.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Court, the day and year above written.

J. E. Fultz [SEAL]
By R. C. Merritt D. C.

TOGETHER with all and singular the easments, rights tenements, hereditaments, and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, AND ALSO, all the estate, right, title, interest, dower and right of dower, separate estate, property, possession, claim and demand whatsoever, as well in law as in equity, of the said part ies of the first part, of, in, and to the same, and every part and parcel thereof, with the appurtenances: TO HAVE AND TO HOLD the above granted, bargained and described premises, with the appurtenances, unto the said part y of the second part, its successors ~~heirs~~ and assigns, to its and their own proper use, benefit and behoof forever.

And the said part ies of the first part, for their heirs, executors, and administrators, do covenant, promise and agree to and with said part y of the second part, its successors ~~heirs~~ and assigns, that the said part ies of the first part at the time of the sealing and delivery of these presents, were lawfully seized in fee simple of a good, absolute, and indefeasible estate of inheritance, of and in, all and singular the above granted, bargained and described premises, with the appurtenances thereto and had good right, full power, and lawful authority to grant, bargain, sell, and convey the same in manner and form aforesaid. And that the said part y of the second part its successors ~~heirs~~ and assigns, shall and may at all times hereafter, peacefully and quietly have, hold, use, occupy, possess and enjoy the above granted premises, and every part and parcel thereof, with the appurtenances, without any let, suit, trouble, molestation, eviction or disturbance of the said part ies of the first part their heirs or assigns, or of any other person or persons lawfully claiming or to claim the same. And that the same are now free, clear, discharged and unincumbered of and from all former and other grants, titles, charges, estates, judgments, taxes, assessments and incumbrances of what nature and kind soever.

lawful

And the said part ies of the first part, for themselves and their heirs, the above described and hereby granted and released premises, and every part and parcel thereof, with the appurtenances, unto the said part y of the second part its successors ~~heirs~~ and assigns, against the said part y of the first part and their heirs, and against all and every person or persons whomsoever, lawfully claiming or to claim the same shall and will warrant, and by these presents forever defend.

IN WITNESS WHEREOF, the said part ies of the first part have hereunto set their hands and seals the day and year first above written.

Signed, Sealed and Delivered in Presence of us:

A O Penney
W M Hendry

[illegible] [SEAL]
[illegible] [SEAL]

This Indenture, Made the 28th day of March
in the year of our Lord one thousand nine hundred and Ten
BETWEEN W. J. Joyner and Margaret A. Joyner, His wife, of the County of St. Lucie and State of Florida of the first part, and the Florida East Coast Railway, a corporation, of Dade State and County of the second part,
WITNESSETH, That said part ies of the first part, for and in consideration of the sum of
Seventeen Hundred ($1700.00) Dollars,
lawful money of the United States of America to them in hand paid by the said part y or the second part, at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, have granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents do grant, bargain, sell, alien, remise, release, convey and confirm unto the said part y of the second part, and its successors ~~heirs~~ and assigns forever, all those tracts and parcels of land
lying and being in the County of St. Lucie, and State of Florida, and described as follows: Beginning at the intersection of the South line of Lot Two (2) of Tylers subdivision of Government Lot 4, Section 10, Township 35, South, Range 40 East, said Starting point being located 30 feet measured at right angles from center line of Main Track of the Florida East Coast Railway, and running thence Northerly on said East line of right of way parallel to and 30 feet distant from said center line for 214 feet, more or less, to the North line of Lot 2 of Tylers sub-division; thence East along said North line of Lot 2 for 66 feet, more or less to a point located 62.5 feet measured at right angles from said East line of right of way; thence Southerly and parallel to and 62.5 feet Easterly, measured at right angles from the East line of right of way for 212 feet, more or less, to the South line of said Lot 2; thence West along the South line of said Lot 2 for 70 feet, more or less to point of beginning. Also all of Lot 8 of Government Lot 4 of Tylers Sub-division of said Government Lot 4, lying West of the Florida East Coast Railway's right of way, in Section 10, Township 35 South, Range 40 East, except two strips on the East end of said Lot now owned by Yancy Sundy and J. G. May.

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

State of Florida,
County of St. Lucie

KNOW ALL MEN BY THESE PRESENTS, That I Sadie Lowery wife of the above named A.B. Lowery do by these presents, made and executed by me, separate and apart from my said husband, and in the presence of A.D. Penney, a Notary Public of the State of Florida, acknowledged and declare that I did make myself a party to, and executed the foregoing Deed of Conveyance for the purpose of conveying my Dower right of Dower and separate estate in and to the lands in said conveyance therein described and granted, and that I did the same freely and voluntarily, and without any compulsion, constraint, apprehension or fear of or from my said husband.

IN WITNESS WHEREOF, I hereunto subscribe my name and affix my seal, this 23rd day of March A. D. one thousand nine hundred and Nine

Seal.

State of Florida,
County of St. Lucie

TO ALL WHOM IT MAY CONCERN: Be it known that on this 23rd day of March A. D. 1909, personally appeared before me, a Notary Public of the State of Florida, the above named Sadie Lowery to me well known as the wife of A.B. Lowery and as one of the persons described in, and who executed the foregoing Deed of Conveyance, who being at the time separate and apart from her husband, the said A.B. Lowery did then and there make and execute the foregoing acknowledgment, her name being with her own hand subscribed, and her seal affixed in my presence.

WITNESS my hand and seal at Fort Pierce, Fla. the day and year above written.

My commission expires Nov. 12th 1911

A.D. Penney Seal
Notary Public

State of Florida,
County of St. Lucie

On this day personally appeared before me A.B. Lowery to me well known as the person described in, and who executed the foregoing Deed of Conveyance, and acknowledged that he executed the same for the purpose therein expressed, whereupon it is prayed that the same may be recorded.

IN WITNESS WHEREOF, I have hereunto affixed my hand and seal, this 23rd day of March A. D. 1909

My Commission expires Nov. 12th 1911

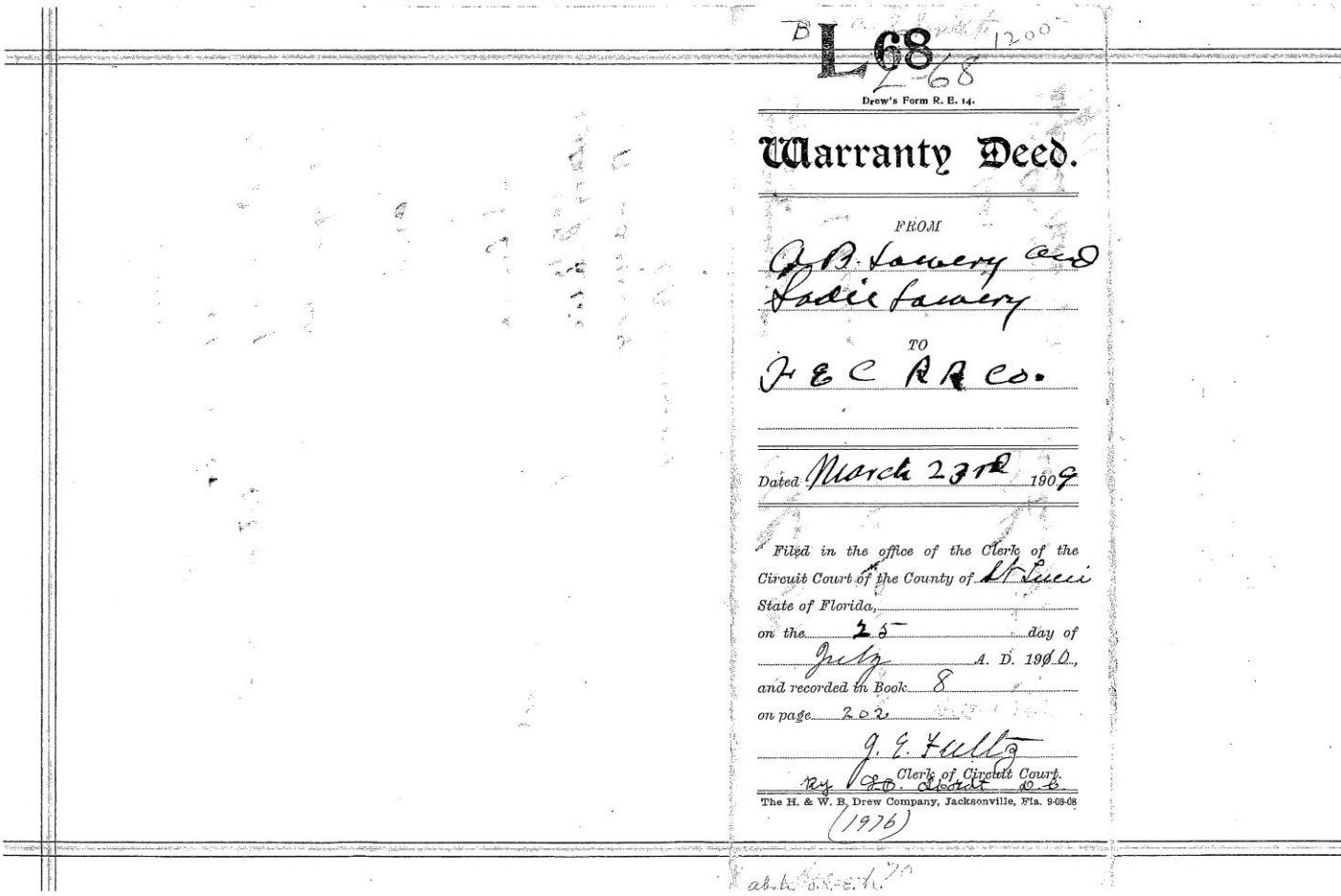
A.D. Penney Seal
Notary Public

State of Florida,
County of St. Lucie

BE IT REMEMBERED, That on this 25th day of July A. D. 1910, I J. E. Futtz Clerk of the Circuit Court in and for said County, have duly recorded the foregoing Deed in the Public Records of said County.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Court, this day and year above written.

J. E. Futtz, C.C. Seal
By R.B. Merritt D.C.



B L 68 1200
L 68

Drew's Form R. E. 14.

Warranty Deed.

FROM

A. B. Lowery and
Lodie Lowery

TO

F E C R R Co.

Dated March 23rd 1909

Filed in the office of the Clerk of the Circuit Court of the County of St Lucie State of Florida,
on the 25 day of July A. D. 1910,
and recorded in Book 8
on page 202

J. E. Fultz
Clerk of Circuit Court.
By [illegible] Deputy D.C.

The H. & W. B. Drew Company, Jacksonville, Fla. 9-09-08

(1976)

ab. to [illegible] 70

TOGETHER with all and singular the easements, rights tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; AND, ALSO, all the estate, right, title, interest, dower, and right of dower, separate estate, property possession, claim and demand whatsoever, as well in law as in equity, of the said parties of the first part, of, in and to the same, and every part and parcel thereof, with the appurtenances.

To Have and to Hold the above granted, bargained and described premises, with the appurtenances, unto the said party of the second part, its successors ~~heirs~~ and assigns, to its own proper use, benefit and behoof forever.

And the said parties of the first part for their heirs, executors and administrators, do covenant, promise and agree to and with the said party of the second part, its successors ~~heirs~~ and assigns, that the said parties of the first part at the time of the sealing and delivery of these presents, were lawfully seized in fee simple of a good, absolute and indefeasible estate of inheritance, of and in all and singular the above granted, bargained and described premises, with the appurtenances, thereto and had good right, full power and lawful authority to grant, bargain, sell and convey the same in the manner and form aforesaid. And that the said party of the second part, its successors ~~heirs~~ or assigns, shall and may at all times hereafter, peacefully and quietly have, hold, use, occupy, possess and enjoy the above granted premises, and every part and parcel thereof, with the appurtenances, without any let, suit, trouble, molestation, eviction or disturbance of the said parties of the first part, their heirs or assigns, or of any other person or persons lawfully claiming or to claim the same. And that the same are now free, clear, discharged and unincumbered of and from all former and other grants, titles, charges, estates, judgments, taxes, assessments and incumbrances of what nature and kind soever.

And the said parties of the first part, for themselves and their heirs, the above described and hereby granted and released premises, and every part and parcel thereof, with the appurtenances, unto the said party of the second part, its successors ~~heirs~~ and assigns, against the said parties of the first part, and their heirs, and against all and every person or persons whomsoever, lawfully claiming or to claim the same, shall and will warrant and by these presents forever defend.

In Witness Whereof The said parties of the first part have hereunto set their hands and seals, the day and year first above written.

Signed, sealed and delivered in the presence of us:

A D Penney
Wiley Lowery

A. B. Lowery (Seal)

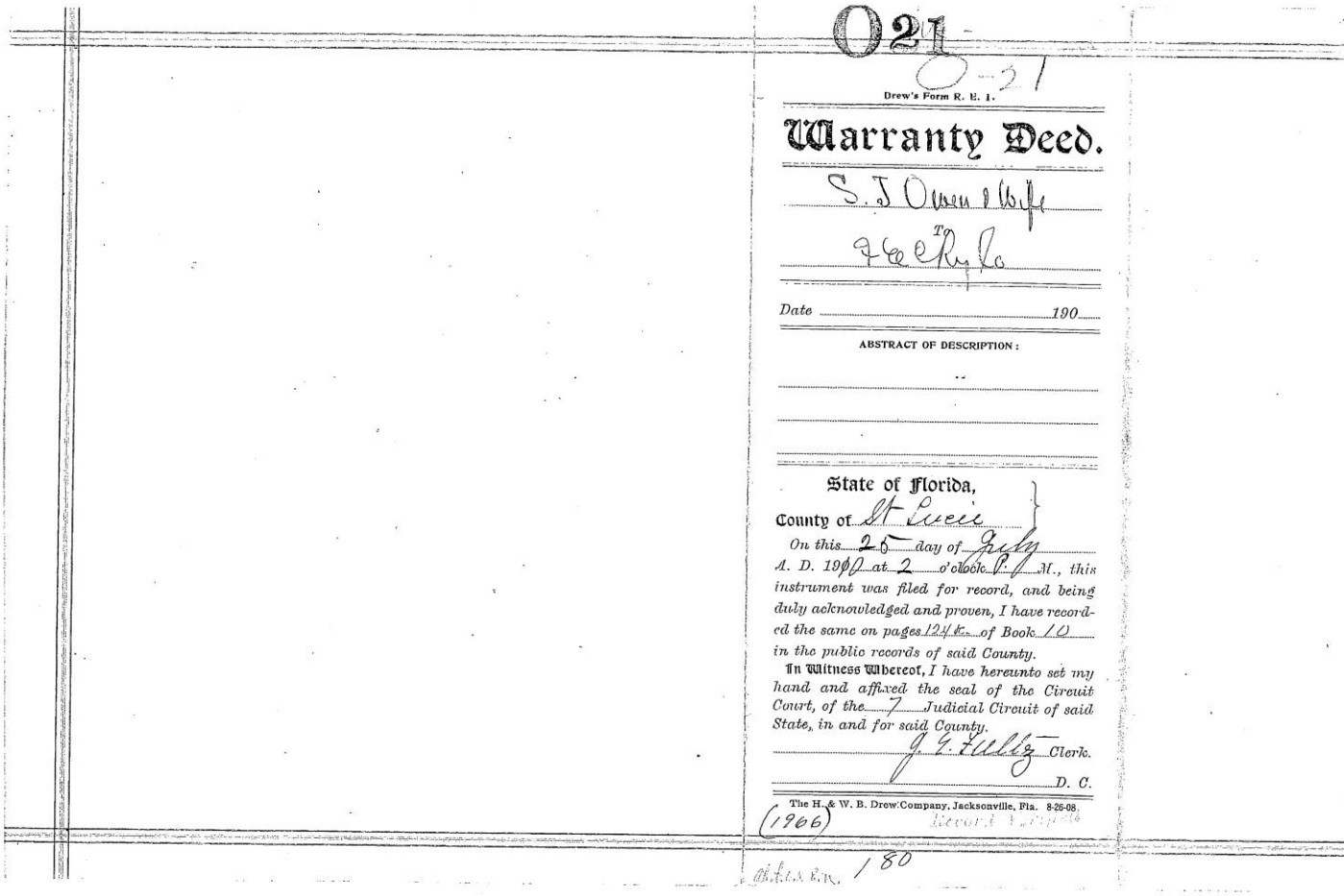
(Seal)

WARRANTY DEED. Drew's Form R. E. 14. Printed and for sale by The H. & W. B. Drew Company, Jacksonville, Fla. 9-25-08

This Indenture, Made the 23rd day of March, in the year of our Lord one thousand nine hundred and Nine, between A.B. Lowery and Sadie Lowery his wife of the County of St. Lucie and State of Florida, of the first part, and The Florida East Coast Railway Company, a corporation doing business in St. Lucie County, of the second part: Witnesseth, That the said parties of the first part, for and in consideration of the sum of Twelve Hundred ($1200.00) Dollars, lawful money of the United States of America, to them in hand paid by the said party of the second part at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, have granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents do grant, bargain, sell, alien, remise, release, convey and confirm unto the said party of the second part, and its successors ~~heirs~~ and assigns, forever, all that lot or parcel of land lying and being in the County of St. Lucie and State of Florida described as follows:

all that part of Lot Seven (7) of Tylers Subdivision of Government Lot Four (4) Section Ten (10) Township Thirty-five (35) South, Range Forty (40) East, lying West of the Florida East Coast Railway's Right of Way containing Two (2) acres, more or less.

021



0-21

Drew's Form R. E. 1.

Warranty Deed.

S. J. Owen & Wife

To

F. E. C. Ry Co

Date ..... 190....

ABSTRACT OF DESCRIPTION:

State of Florida,

County of St Lucie

On this 25 day of July A. D. 1900 at 2 o'clock P. M., this instrument was filed for record, and being duly acknowledged and proven, I have recorded the same on pages 124 &c. of Book 10 in the public records of said County.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Circuit Court, of the 7 Judicial Circuit of said State, in and for said County.

J. E. Fultz Clerk.

D. C.

The H. & W. B. Drew Company, Jacksonville, Fla. 8-26-08.

(1966) Record Triplicate

[illegible] 180

State of Florida }
County of Duval } ss.

I Hereby Certify, That on this 22nd day of April A. D. 1910, before me personally appeared S. J. Owen and Kathleen R. Owen his wife, to me known to be the persons described in and who executed the foregoing conveyance to Florida East Coast Railway Company and severally acknowledged the execution thereof to be their free act and deed for the uses and purposes therein mentioned; and the said Kathleen R. Owen the wife of the said S. J. Owen on a separate and private examination taken and made by and before me, and separately and apart from her said husband, did acknowledge that she made herself a party to the said deed of conveyance for the purpose of renouncing, relinquishing and conveying all her right, title and interest, whether of dower or of separate property, statutory or equitable, in and to the lands therein described, and that she executed said deed freely and voluntarily and without any constraint, fear, apprehension or compulsion of or from her said husband.

Witness my signature and official seal at Jacksonville, in the county of Duval and State of Florida the day and year last aforesaid.

Margaret A. Lawson (Seal)
Notary Public State of Florida at Large
My Commission Expires April 9, 1913.

State of }
County of } ss.

I, an officer authorized to take acknowledgments of deeds, Hereby Certify that

personally known to me to be the individual described in and who executed the foregoing instrument, and that said individual this day acknowledged before me that executed said instrument.

Witness my hand and official seal, this day of A. D. 190
(Seal) at in said County and State.

Together *with all and singular the* lands, easements, *tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; AND ALSO all the estate, right, title, interest, homestead, dower and right of dower, separate estate, property, possession, claim and demand whatsoever, at law and in equity, either and both, of the said part* ies *of the first part, of, in and to the same, and every part and parcel thereof; TO HAVE AND TO HOLD the above described premises, each and every, unto the said part* y *of the second part,* its successors *and assigns, in fee simple, absolute, indefeasibly, forever.*

And the said part ies *of the first part, for* themselves and their *heirs, executors and administrators, jointly and severally, covenant, promise and agree to and with the said part* y *of the second part,* its successors, ~~administrators~~ *and assigns, that the said part* ies *of the first part, at the time of the sealing and delivery of these presents,* are *lawfully seized in fee simple of a good, absolute and indefeasible estate of inheritance of and in all and singular the above described premises, each and every, and* have *good right, full power and lawful authority to convey the same in manner and form aforesaid; that the said part* y *of the second part,* its successors *and assigns, shall and may, at all times hereafter, peaceably and quietly have, hold, use, occupy, possess and enjoy the above described premises, and every part and parcel thereof, without any let, suit, trouble, molestation, eviction or disturbance of the said part* ies *of the first part,* their *heirs or assigns, or of any other person or persons lawfully claiming or to claim the same; that the same, all and singular, are free, clear, discharged and unincumbered of and from all former and other titles, clouds and incumbrances of what nature and kind soever; that the said part* ies *of the first part,* their *heirs, executors and administrators, each and every, shall make, execute and acknowledge such further and other deeds and assurances as by counsel learned in the law may be considered reasonably proper to effectuate the full intent and meaning of this instrument.*

And the said part ies *of the first part, for* themselves and their *heirs, the above described premises, and every part and parcel thereof, unto the said part* y *of the second part,* its successors *and assigns, against the said part* ies *of the first part, and* their *heirs, and against all and every person or persons whomsoever lawfully claiming or to claim the same shall and will warrant and by these presents forever defend.*

This alienation is with the joint consent of husband and wife, where that relation exists.

In Witness Whereof, *the said part* ies *of the first part* have *hereunto set* their *hands and seals each in the presence of two subscribing witnesses.*

Signed, sealed and delivered in presence of us:

Maynard H Ramsey	S. J. Aven (Seal)
Nathaniel Washington	Kathleen R Aven (Seal)
	(Seal)
	(Seal)

WARRANTY DEED. Drew's Form R. E. 1. Printed and for sale by The H. & W. B. Drew Company, Jacksonville, Fla. 8-26-08.

This Warranty Deed of Conveyance, *Executed this* 20th *day of* April *in the year of our Lord one thousand nine hundred and* ten (1910) *BY AND BETWEEN* S. J. Owen and wife Kathleen-R. Owen, parties

of the first part, and Florida East Coast Railway Company, a Florida corporation, doing busines in the State of Florida and the County of St. Lucie.

of the second part,

Witnesseth, *That the said part* ies *of the first part, for and in consideration of the sum of* One thousand Nine hundred fifty ($1950.00) *DOLLARS lawful money of the United States of America, to* them *in hand paid by the said part* y *of the second part, at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, by these presents* do *give, grant, bargain, sell, alien, enfeoff, remise, release, convey and confirm unto the said part* y *of the second part and* its successors ~~s~~ *that certain property in the County of* St. Lucie *and State of* Florida, *described as follows:* Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 22; of Owen's Addition to Fort-Pierce, St. Lucie, County, Florida, according to the plat recorded on the 23rd day of February, 1909, in plat book 1 at page 25, public rec rds of St. Lucie County, Florida. Said property being and comprising all that part lying west of the Florida East Coast Railway of Lot 5, and north 175 feet of lot 6 of Tylers subdivision of lot 4, Section 10, Township 35 South of range 40 east.

Subject however to a certain mortgage for the sum of $250.00 given on the 22nd day of April, 1909 by the said parties of the first part to J. S. Smart, which said mortgage the said second party here-in assumes and agrees to pay.

It being the intention hereby to convey the same land as that conveyed to the said S. J. Owen by deed from J. S. Smart and wife, dated April 12, 1909, and recorded in Book 6 of deeds, at page 320, Brevard County Records, and the same property as that conveyed to said J. S. Smart by William F. Richards and others by deed dated October 29, 1901, and recorded in Book "KK" at page 221, Brevard County Records.

Also hereby conveying all right, title and interest, rever-sionary and otherwise, in and to all streets which appear on the plat of Owen's Addition to Fort Pierce, as recorded in Book 1, at page 25, February 23, 1909, and by any other plat affect-ing said lots, with the right to said Railway Company to close and occupy any and all such streets.

Florida East Coast
RAILWAY, L.L.C.

Francis J. Chinnici
Senior Vice President
Engineering, Mechanical
and Purchasing

March 3, 2015

TO: City of Fort Pierce;
St. Lucie County Fire District;
South Florida Water Management District
St. Lucie County Health Department

RE: Rocla Crosstie Facility

On behalf of **Florida East Coast Railway (FEC)**, we hereby authorize Rocla Concrete Tie, Inc. to act as our agent relative to agency approvals and permits for the above referenced property and project.

Florida East Coast Railway (FEC)

By: _____ FRANCIS J. CHINNICI SVP ENG, MECH & PURCHASING 3-18-15
Signature Print name Title Date

STATE OF FLORIDA
COUNTY OF ST. LUCIE

The foregoing instrument was acknowledged before me this 18th day of March, 2015 by for Florida East Coast Railway (FEC), who is personally known/provided identification to me on behalf of Florida East Coast Railway (FEC).

[Notary Seal or Stamp]

_____
Notary Public-State of Florida
Print Name: Mary T. GRIFFIN
My Commission Expires: 8/20/18

MARY T GRIFFIN
MY COMMISSION #FF148473
EXPIRES August 20, 2018
(407) 398-0153 FloridaNotaryService.com

7150 Philips Highway, Jacksonville, FL 32256
904-279-3119

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

March 19, 2015

TO: City of Fort Pierce;
St. Lucie County Fire District; and
South Florida Water Management District
St. Lucie County Health Department

RE: Rocla Crosstie Facility

On behalf of **Rocla Concrete Tie, Inc**, we hereby authorize Bill (Rusty) Croley of Rocla Concrete Tie, Inc. and Stefan Matthes P.E. of Culpepper & Terpening, Inc. to act as our agents relative to agency approvals and permits for the above referenced property and project.

Rocla Concrete Tie, Inc.

By: Peter Urquhart Presdent 3/19/2015
Signature Print name Title Date

STATE OF COLORADO
COUNTY OF JEFFERSON

The foregoing instrument was acknowledged before me this 19th day of March, 2015 by Peter Urquhart as a registered agent, for Rocla Concrete Tie, Inc who is personally known/provided identification to me on behalf of Rocla Concrete Tie, Inc.

[Notary Seal or Stamp]

IANA MCMORRIS
Notary Public
State of Colorado

Notary Public-State of Colorado
Print Name: Iana McMorris
My Commission Expires: 05/29/2016

1819 Denver West Drive, Suite 450
Lakewood, CO 80401
Tel (303) 296 3500
www.roclatie.com

E-Filed

Colorado Secretary of State
Date and Time: 11/03/2014 08:50 AM
ID Number: 20031277189

Document number: 20141675046
Amount Paid: $60.00

Document must be filed electronically.
Paper documents are not accepted.
Fees & forms are subject to change.
For more information or to print copies
of filed documents, visit www.sos.state.co.us.

ABOVE SPACE FOR OFFICE USE ONLY

Periodic Report

filed pursuant to §7-90-301, et seq. and §7-90-501 of the Colorado Revised Statutes (C.R.S)

ID number: 20031277189

Entity name: ROCLA CONCRETE TIE, INC.

Jurisdiction under the law of which the entity was formed or registered: Texas

1. Principal office street address:
1819 Denver West Dr. *(Street name and number)*
Suite 450
Lakewood *(City)* CO *(State)* 80401 *(Postal/Zip Code)*
(Province – if applicable) United States *(Country – if not US)*

2. Principal office mailing address: (if different from above)
(Street name and number or Post Office Box information)
(City) *(State)* *(Postal/Zip Code)*
(Province – if applicable) *(Country – if not US)*

3. Registered agent name: (if an individual) URQUHART *(Last)* PETER *(First)* A. *(Middle)* *(Suffix)*

or (if a business organization)

4. The person identified above as registered agent has consented to being so appointed.

5. Registered agent street address:
1819 Denver West Dr. *(Street name and number)*
Suite 450
Lakewood *(City)* CO *(State)* 80401 *(Postal/Zip Code)*

6. Registered agent mailing address: (if different from above)
(Street name and number or Post Office Box information)
(City) *(State)* *(Postal/Zip Code)*
(Province – if applicable) *(Country – if not US)*

REPORT Page 1 of 2 Rev. 12/01/2012

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Notice:
Causing this document to be delivered to the secretary of state for filing shall constitute the affirmation or acknowledgment of each individual causing such delivery, under penalties of perjury, that the document is the individual's act and deed, or that the individual in good faith believes the document is the act and deed of the person on whose behalf the individual is causing the document to be delivered for filing, taken in conformity with the requirements of part 3 of article 90 of title 7, C.R.S., the constituent documents, and the organic statutes, and that the individual in good faith believes the facts stated in the document are true and the document complies with the requirements of that Part, the constituent documents, and the organic statutes.

This perjury notice applies to each individual who causes this document to be delivered to the secretary of state, whether or not such individual is named in the document as one who has caused it to be delivered.

7. Name(s) and address(es) of the individual(s) causing the document to be delivered for filing:

McMahan	Desiree	M.	
(Last)	*(First)*	*(Middle)*	*(Suffix)*

1819 Denver West Dr.
(Street name and number or Post Office Box information)

Suite 450

Lakewood	CO	80401
(City)	*(State)*	*(Postal/Zip Code)*

	United States
(Province – if applicable)	*(Country – if not US)*

(The document need not state the true name and address of more than one individual. However, if you wish to state the name and address of any additional individuals causing the document to be delivered for filing, mark this box ☐ *and include an attachment stating the name and address of such individuals.)*

Disclaimer:
This form, and any related instructions, are not intended to provide legal, business or tax advice, and are offered as a public service without representation or warranty. While this form is believed to satisfy minimum legal requirements as of its revision date, compliance with applicable law, as the same may be amended from time to time, remains the responsibility of the user of this form. Questions should be addressed to the user's attorney.

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE

I, Wayne W. Williams, as the Secretary of State of the State of Colorado, hereby certify that, according to the records of this office,

ROCLA CONCRETE TIE, INC.

is an entity formed or registered under the law of **Texas** has complied with all applicable requirements of this office, and is in good standing with this office. This entity has been assigned entity identification number 20031277189.

This certificate reflects facts established or disclosed by documents delivered to this office on paper through 03/16/2015 that have been posted, and by documents delivered to this office electronically through 03/17/2015 @ 09:17:20.

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, authenticated, issued, delivered and communicated this official certificate at Denver, Colorado on 03/17/2015 @ 09:17:20 pursuant to and in accordance with applicable law. This certificate is assigned Confirmation Number 9126697.

Secretary of State of the State of Colorado

**********End of Certificate**********

Notice: A certificate issued electronically from the Colorado Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Confirmation Page of the Secretary of State's Web site, http://www.sos.state.co.us/biz/CertificateSearchCriteria.do entering the certificate's confirmation number displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate. For more information, visit our Web site, http://www.sos.state.co.us/ click Business Center and select "Frequently Asked Questions."

CERT_GS_F Revised 08/20/2008



Underline is for Addition from prior submission
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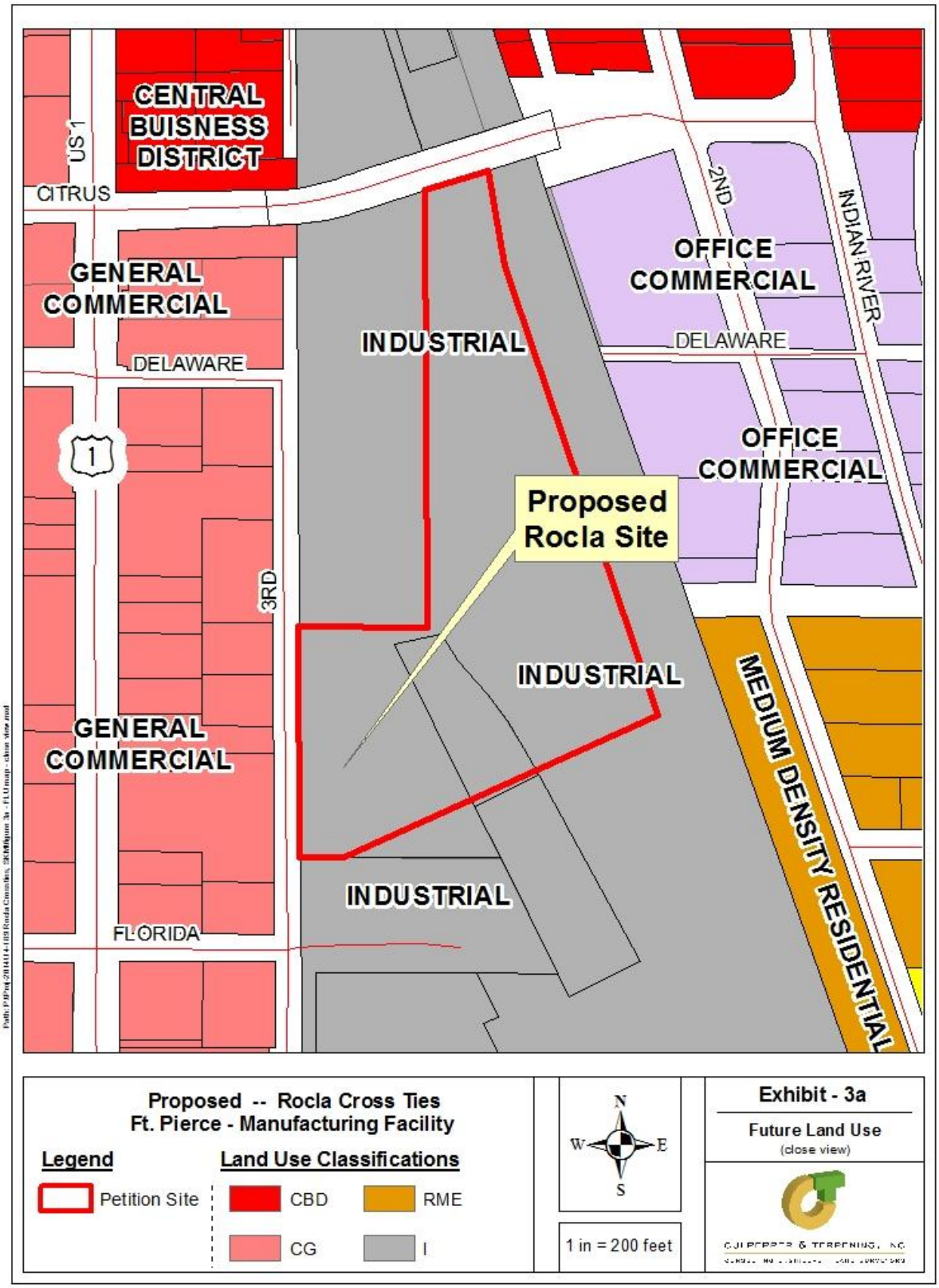

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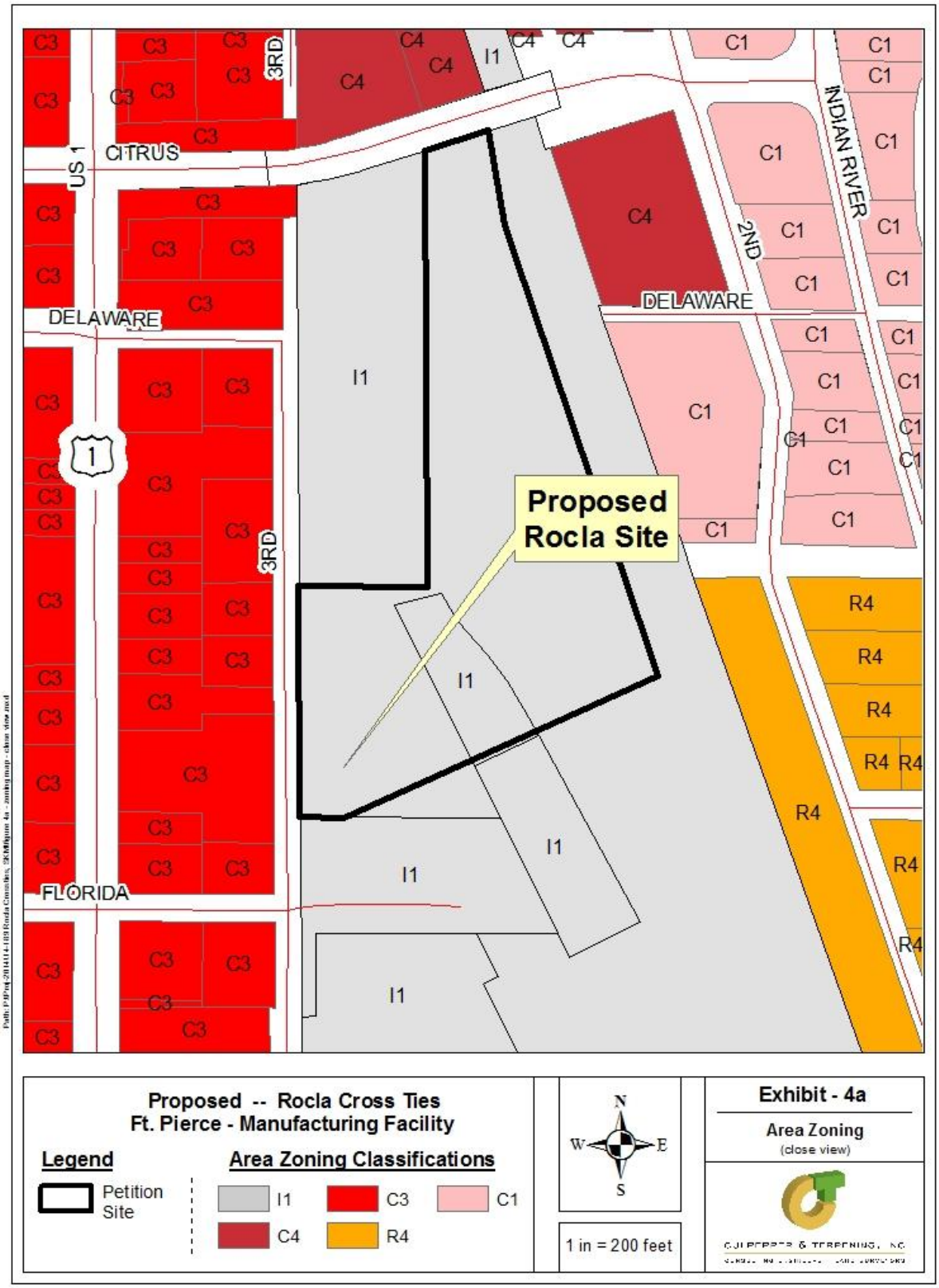

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SECTION III

PETITION FOR SITE PLAN APPROVAL ASSOCIATED WITH THE PLANNED DEVELOPMENT ZONING DISTRICT - ROCLA CONCRETE TIE

CITY OF FORT PIERCE

PLANNING DEPARTMENT

Rebecca Grohall, AICP, Planning Manager
COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

DEVELOPMENT REVIEW

Property address or Location S. 3rd St. Fort Pierce, FL 34950

Parcel ID #(s) 2410-805-0005-000-1 & 2410-811-0001-030-1

Project description Construction of crosstie manufacturing facility on 7.55 acre site.

Florida East Coast Railway L.L.C. (FEC)	Rusty Croley, VP, Rocla Concrete Tie, Inc.
Property Owner(s)	**Applicant/Representative, Title, Company**
7411 Fullerton St. Suite 300	1819 Denver West Drive, Suite 450
Street Address	Street Address
Jacksonville FL 32256-3629	Lakewood CO 80401
City State Zip	City State Zip
—	(303) 296-3500
Phone Number	Phone Number
—	rcroley@roclatie.com
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

(SEE AGENT LETTER DATED 03/18/15)
Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY Indian River

The foregoing instrument was acknowledged before me this 24 day of March, 2015, by Rusty Croley who is personally known to me or has produced Colorado License # 02049539S as identification.

Mary Tatro
Signature of Notary

MARY TATRO
MY COMMISSION # EE 161062
EXPIRES: April 17, 2016
Bonded Thru Notary Public Underwriters

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____
Intake Planner_____
Planner Assigned_____
Approved By_____ Date _____
Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

☐ DEVELOPMENT REVIEW

General Information

- ☐ Incomplete application packets cannot be accepted.
- ☐ Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

Choose Application Type:

Application Type		
☒ Site Plan	☐ Conditional Use with New Const.	☐ Major Amendment
☐ Conceptual Development Plan		☐ Minor Amendment

Site Information:

Non-Residential: Proposed Sq. Ft.: 328,745 Residential: Proposed Units: N/A

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

North	South	East	West
COMMERCIAL	INDUSTRIAL	RAIL ROAD	COMMERCIAL

Application Outlook



Site Plan submittal requirements:

Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- ☑ Complete notarized application
- ☑ Warranty Deed
- ☑ SLC Property Record Card
- ☑ Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- ☑ General location map (see Section 22-58.d.2)
- ☑ Survey (see Section 22-58.d.3)
- ☑ Site Plan (see Section 22-58.d.4)
- ☑ Landscaping Plan (see Section 22-187)
- ☑ Storm Drainage Plan (see Section 22-58.d.6)
- ☑ Environmental Impact Report
- ☐ Beach/Dune System protection plan, if applicable (see Section 22-58.d.7) N/A
- ☑ Lighting Plan (see Section 22-58.d.8)
- ☑ Design Review submittals (see Design Review application)
- ☑ Traffic Impact Report
- ☑ Concurrency Review submittals (see Concurrency Review application)

PETITION FOR SITE PLAN APPROVAL ASSOCIATED WITH THE PLANNED DEVELOPMENT ZONING DISTRICT ROCLA CONCRETE

LEGAL DESCRIPTION

Being a parcel of land lying in Section 10, Township 35 South, Range 40 East, St. Lucie County, Florida, being more particularly described as follows;

Commence at the intersection of the Easterly extension of the South line of Boston Avenue and the East right-of-way line of South 3rd Street (a 40.00 foot wide right-of-way); thence South along said East right-of-way line a distance of 1015 feet to the POINT OF BEGINNING of the following described parcel;

Thence South 89°27'08" East, a distance of 213.12 feet; thence North 00°18'18" West, a distance of 716.50 feet; thence North 72°26'59" East, a distance of 108.50 feet; thence South 10°14'45" East, a distance of 158.70 feet; thence South 18°46'28" East, a distance of 779.10 feet; thence South 65°40'12" West, a distance of 565.38 feet; thence North 89°43'59" West, a distance of 73.73 feet to the East right-of-way line of South 3rd Street; thence North 00°25'42" West, along said East right-of-way line, a distance of 379.25 feet to the POINT OF BEGINNING.

PARCEL ID NUMBERS

2410-805-0005-000/1 (pt of)
2410-811-0001-030/1

SITE ACERAGE: 7.18 acres

Property Identification

Site Address: TBD
Parcel ID: 2410-811-0001-030-1
Account #: 23916
Sec/Town/Range: 10/35S/40E
Map ID: 24/10H
Zoning: I1
Use Type: 9800
Jurisdiction: Fort Pierce

Ownership

FEC RR

7411 Fullerton St Ste 300
Jacksonville, FL 32256-3629

Legal Description

ANDREWS AND RICHARDS S/D (WEST) PART OF BLKS A AND B MPDAF: BEG AT A PT 10 FT E OF AND 268 FT SELY OFN TERMINUS OF TRACK #93, TH NELY AT RT ANG TO TRACK #93 115 FT TOPT 10 FT W OF TRACK #10, TH NWLY // WITH AND 10 FT W OF TRACK #10 283 FT, TH SWLY 82 FT, TH SELY // WITH AND 10 FT E OF TRACK #93 298 FT TO POB (0.70 AC) (MAP 24/10H)

Current Values

Just/Market:	$0	**Assessed:**	$0
Exemptions:	$0	**Taxable:**	$0

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2014	$0	$0	$0	$0
2013	$0	$0	$0	$0
2012	$0	$0	$0	$0

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
12-05-1975	0246 / 1265				$1

Total Areas

Land Size (acres):	
Land Size (SF):	
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt

This information is believed to be correct at this time but it is subject to change and is not warranted.

© Copyright 2014 Saint Lucie County Property Appraiser.

Property Identification

Site Address: TBD
Parcel ID: 2410-805-0005-000-1
Account #: 23863
Sec/Town/Range: 10/35S/40E
Map ID: 24/10G
Zoning: I1
Use Type: 9800
Jurisdiction: Fort Pierce

Ownership

FEC RR

7411 Fullerton St Ste 300
Jacksonville, FL 32256-3629

Legal Description

TYLER`S S/D THAT PART OF LOTS 1-13 INCL-LESS THAT PART LEASED TO SWAIN GROVES, GEORGIA HWY EXPRESS AND ADOBE BRICK AND SUPPLY AND LESS TO RINKER MATERIALS CORP AS IN OR 391-2382 AND LESS ANDREWS AND RICHARDS S/D (WEST) AND LESS THAT PART AS IN OR 2921-900- (MAP 24/10G)

Current Values

Just/Market:	$0	**Assessed:**	$0
Exemptions:	$0	**Taxable:**	$0

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2014	$0	$0	$0	$0
2013	$0	$0	$0	$0
2012	$0	$0	$0	$0

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
12-05-1975	0246 / 1265				$1

Total Areas

Land Size (acres):
Land Size (SF):
Total Building Count: 1

Special Features and Yard Items

Type	Qty	Units	Year Blt

This information is believed to be correct at this time but it is subject to change and is not warranted.

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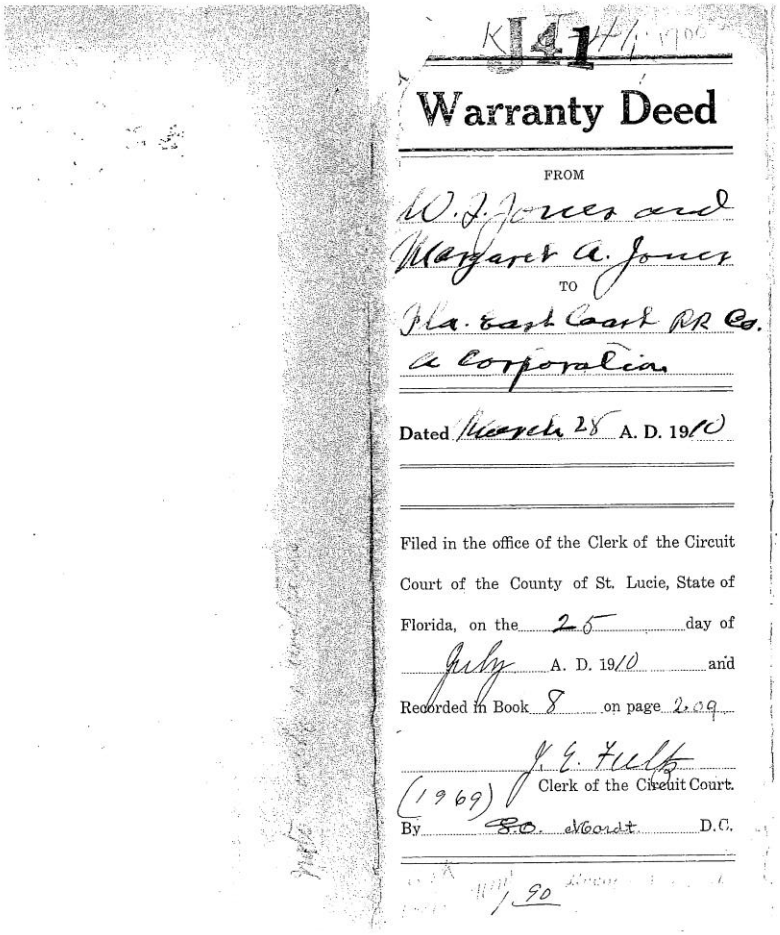


K 141

Warranty Deed

FROM

W. J. Jones and
Margaret A. Jones

TO

Fla. East Coast RR Co.
a Corporation

Dated March 28 A. D. 1910

Filed in the office of the Clerk of the Circuit Court of the County of St. Lucie, State of Florida, on the 25 day of July A. D. 1910 and Recorded in Book 8 on page 209

J. E. Fultz
(1969) Clerk of the Circuit Court.

By S.O. Mordt D.C.

1 90

STATE OF FLORIDA,
COUNTY OF St. Lucie

KNOW ALL MEN BY THESE PRESENTS, THAT I, Margaret A. Jones wife of the above named W. L. Jones do by these presents, made and executed by me, separate and apart from my said husband, and in the presence of A. H. Penney a Notary Public of the State of Florida, acknowledge and declare that I did make myself a party to, and executed the foregoing Deed of Conveyance, for the purpose of releasing and conveying my Dower & separate Estate in and to the lands in said conveyance therein described and granted, and that I did the same freely and voluntarily, and without any compulsion, constraint, apprehension or fear, of or from my said husband.

IN WITNESS WHEREOF, I hereunto subscribe my name and affix my seal, this 28th day of March A. D., one thousand nine hundred and ten

[SEAL]
Notary Public
My commission expires Nov. 12 – 1911

STATE OF FLORIDA,
COUNTY OF St. Lucie

TO ALL WHOM IT MAY CONCERN: Be it known that on this 28th day of March A. D., 1910, personally appeared before me a Notary Public of the State of Florida, the above named Margaret A. Jones to me well known as the wife of W. L. Jones and as one of the persons described in and who executed the foregoing Deed of Conveyance, who being at the time separate and apart from her husband, the said W. L. Jones did then and there make and execute the foregoing acknowledgment, her name being with her own hand subscribed, and her seal affixed in my presence.

WITNESS my hand and seal, at Fort Pierce Fla the day and year above written.

[SEAL]
My commission expires Nov. 12 – 1911
Notary Public St Lucie Co Fla

STATE OF FLORIDA,
COUNTY OF St. Lucie

ON THIS DAY personally appeared before me W. L. Jones and Margaret A. Jones to me well known as the persons described in, and who executed the foregoing Deed of Conveyance, and acknowledged that they executed the same for the purpose therein expressed; whereupon it is prayed that the same may be recorded.

IN WITNESS WHEREOF, I have hereunto affixed my hand and seal, this 28th day of March A. D., 1910

[SEAL]
Notary Public

STATE OF FLORIDA
COUNTY OF ST. LUCIE

BE IT REMEMBERED, That on this 25th day of July A. D., 1910, I, J. E. FULTZ, Clerk of the Circuit Court in and for said County, have duly recorded the foregoing Deed in the Public Records of said County.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Court, the day and year above written.

J. E. Fultz [SEAL]
By R. C. Merritt D. C.

TOGETHER with all and singular the easments, rights tenements, hereditaments, and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, AND ALSO, all the estate, right, title, interest, dower and right of dower, separate estate, property, possession, claim and demand whatsoever, as well in law as in equity, of the said part ies of the first part, of, in, and to the same, and every part and parcel thereof, with the appurtenances: TO HAVE AND TO HOLD the above granted, bargained and described premises, with the appurtenances, unto the said part y of the second part, its successors ~~heirs~~ and assigns, to its and their own proper use, benefit and behoof forever.

And the said part ies of the first part, for their heirs, executors, and administrators, do covenant, promise and agree to and with said part y of the second part, its successors ~~heirs~~ and assigns, that the said part ies of the first part at the time of the sealing and delivery of these presents, were lawfully seized in fee simple of a good, absolute, and indefeasible estate of inheritance, of and in, all and singular the above granted, bargained and described premises, with the appurtenances thereto and had good right, full power, and lawful authority to grant, bargain, sell, and convey the same in manner and form aforesaid. And that the said part y of the second part its successors ~~heirs~~ and assigns, shall and may at all times hereafter, peacefully and quietly have, hold, use, occupy, possess and enjoy the above granted premises, and every part and parcel thereof, with the appurtenances, without any let, suit, trouble, molestation, eviction or disturbance of the said part ies of the first part their heirs or assigns, or of any other person or persons lawfully claiming or to claim the same. And that the same are now free, clear, discharged and unincumbered of and from all former and other grants, titles, charges, estates, judgments, taxes, assessments and incumbrances of what nature and kind soever.

lawful

And the said part ies of the first part, for themselves and their heirs, the above described and hereby granted and released premises, and every part and parcel thereof, with the appurtenances, unto the said part y of the second part its successors ~~heirs~~ and assigns, against the said part y of the first part and their heirs, and against all and every person or persons whomsoever, lawfully claiming or to claim the same shall and will warrant, and by these presents forever defend.

IN WITNESS WHEREOF, the said part ies of the first part have hereunto set their hand s and seal s the day and year first above written.

Signed, Sealed and Delivered in Presence of us:

A O Penney
W M Hendry

[illegible] [SEAL]
[illegible] [SEAL]

This Indenture, Made the 28th day of March
in the year of our Lord one thousand nine hundred and Ten
BETWEEN W. J. Joyner and Margaret A. Joyner, His wife, of the County of St. Lucie and State of Florida of the first part, and the Florida East Coast Railway, a corporation, of Dade State and County of the second part,
WITNESSETH, That said part ies of the first part, for and in consideration of the sum of
Seventeen Hundred ($1700.00) Dollars,
lawful money of the United States of America to them in hand paid by the said part y or the second part, at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, have granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents do grant, bargain, sell, alien, remise, release, convey and confirm unto the said part y of the second part, and its successors ~~heirs~~ and assigns forever, all those tracts and parcels of land
lying and being in the County of St. Lucie, and State of Florida, and described as follows: Beginning at the intersection of the South line of Lot Two (2) of Tylers subdivision of Government Lot 4, Section 10, Township 35, South, Range 40 East, said Starting point being located 30 feet measured at right angles from center line of Main Track of the Florida East Coast Railway, and running thence Northerly on said East line of right of way parallel to and 30 feet distant from said center line for 214 feet, more or less, to the North line of Lot 2 of Tylers sub-division; thence East along said North line of Lot 2 for 66 feet, more or less to a point located 62.5 feet measured at right angles from said East line of right of way; thence Southerly and parallel to and 62.5 feet Easterly, measured at right angles from the East line of right of way for 212 feet, more or less, to the South line of said Lot 2; thence West along the South line of said Lot 2 for 70 feet, more or less to point of beginning. Also all of Lot 8 of Government Lot 4 of Tylers Sub-division of said Government Lot 4, lying West of the Florida East Coast Railway's right of way, in Section 10, Township 35 South, Range 40 East, except two strips on the East end of said Lot now owned by Yancy Sundy and J. G. May.

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

State of Florida,
County of St. Lucie }

KNOW ALL MEN BY THESE PRESENTS, That I Sadie Lowery wife of the above named A.B. Lowery do by these presents, made and executed by me, separate and apart from my said husband, and in the presence of A.D. Penney, a Notary Public of the State of Florida, acknowledged and declare that I did make myself a party to, and executed the foregoing Deed of Conveyance for the purpose of conveying my Dower right of Dower and legal estate in and to the lands in said conveyance therein described and granted, and that I did the same freely and voluntarily, and without any compulsion, constraint, apprehension or fear of or from my said husband.

IN WITNESS WHEREOF, I hereunto subscribe my name and affix my seal, this 23rd day of March A. D. one thousand nine hundred and Nine

Seal.

State of Florida,
County of St. Lucie }

TO ALL WHOM IT MAY CONCERN: Be it known that on this 23rd day of March A. D. 1909, personally appeared before me, a Notary Public of the State of Florida, the above named Sadie Lowery to me well known as the wife of A.B. Lowery and as one of the persons described in, and who executed the foregoing Deed of Conveyance, who being at the time separate and apart from her husband, the said A.B. Lowery did then and there make and execute the foregoing acknowledgment, her name being with her own hand subscribed, and her seal affixed in my presence.

WITNESS my hand and seal at Fort Pierce, Fla. the day and year above written.

My commission expires Nov. 12th 1911

A.D. Penney Seal
Notary Public

State of Florida,
County of St. Lucie }

On this day personally appeared before me A.B. Lowery to me well known as the person described in, and who executed the foregoing Deed of Conveyance, and acknowledged that he executed the same for the purpose therein expressed, whereupon it is prayed that the same may be recorded.

IN WITNESS WHEREOF, I have hereunto affixed my hand and seal, this 23rd day of March A. D. 1909

My Commission expires Nov. 12th 1911

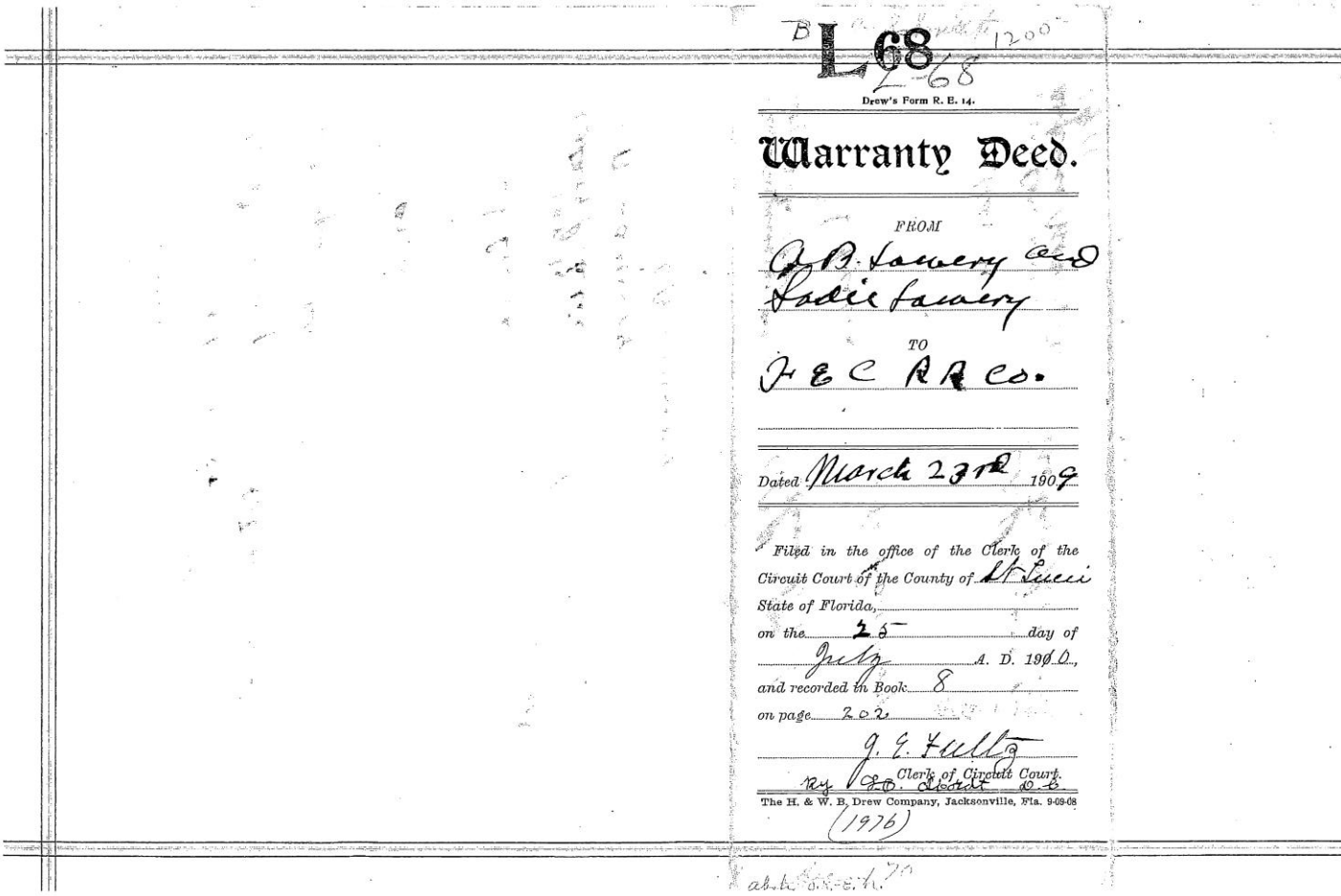
A.D. Penney Seal
Notary Public

State of Florida,
County of St. Lucie }

BE IT REMEMBERED, That on this 25th day of July A. D. 1910, I J. E. Futch Clerk of the Circuit Court in and for said County, have duly recorded the foregoing Deed in the Public Records of said County.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said Court, this day and year above written.

J. E. Futch C.C. Seal
By R. L. Merritt D.C.



B L 68 1200
L-68

Drew's Form R. E. 14.

Warranty Deed.

FROM

A. B. Lowery and
Sadie Lowery

TO

F E C R R Co.

Dated March 23rd 1909

Filed in the office of the Clerk of the Circuit Court of the County of St Lucie State of Florida, on the 25 day of July A. D. 1910, and recorded in Book 8 on page 202

J. E. Fultz
Clerk of Circuit Court.
By [illegible] Deputy D.C.

The H. & W. B. Drew Company, Jacksonville, Fla. 9-09-08

(1976)

ab. to [illegible] 70

TOGETHER with all and singular the easements, rights tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; AND, ALSO, all the estate, right, title, interest, dower, and right of dower, separate estate, property possession, claim and demand whatsoever, as well in law as in equity, of the said parties of the first part, of, in and to the same, and every part and parcel thereof, with the appurtenances.

To Have and to Hold the above granted, bargained and described premises, with the appurtenances, unto the said party of the second part, its successors ~~heirs~~ and assigns, to its own proper use, benefit and behoof forever.

And the said parties of the first part for their heirs, executors and administrators, do covenant, promise and agree to and with the said party of the second part, its successors ~~heirs~~ and assigns, that the said parties of the first part at the time of the sealing and delivery of these presents, were lawfully seized in fee simple of a good, absolute and indefeasible estate of inheritance, of and in all and singular the above granted, bargained and described premises, with the appurtenances, thereto and had good right, full power and lawful authority to grant, bargain, sell and convey the same in the manner and form aforesaid. And that the said party of the second part, its successors ~~heirs~~ or assigns, shall and may at all times hereafter, peacefully and quietly have, hold, use, occupy, possess and enjoy the above granted premises, and every part and parcel thereof, with the appurtenances, without any let, suit, trouble, molestation, eviction or disturbance of the said parties of the first part, their heirs or assigns, or of any other person or persons lawfully claiming or to claim the same. And that the same are now free, clear, discharged and unincumbered of and from all former and other grants, titles, charges, estates, judgments, taxes, assessments and incumbrances of what nature and kind soever.

And the said parties of the first part, for themselves and their heirs, the above described and hereby granted and released premises, and every part and parcel thereof, with the appurtenances, unto the said party of the second part, its successors ~~heirs~~ and assigns, against the said parties of the first part, and their heirs, and against all and every person or persons whomsoever, lawfully claiming or to claim the same, shall and will warrant and by these presents forever defend.

In Witness Whereof The said parties of the first part have hereunto set their hands and seals, the day and year first above written.

Signed, sealed and delivered in the presence of us:

A D Penney
Wiley Lowery

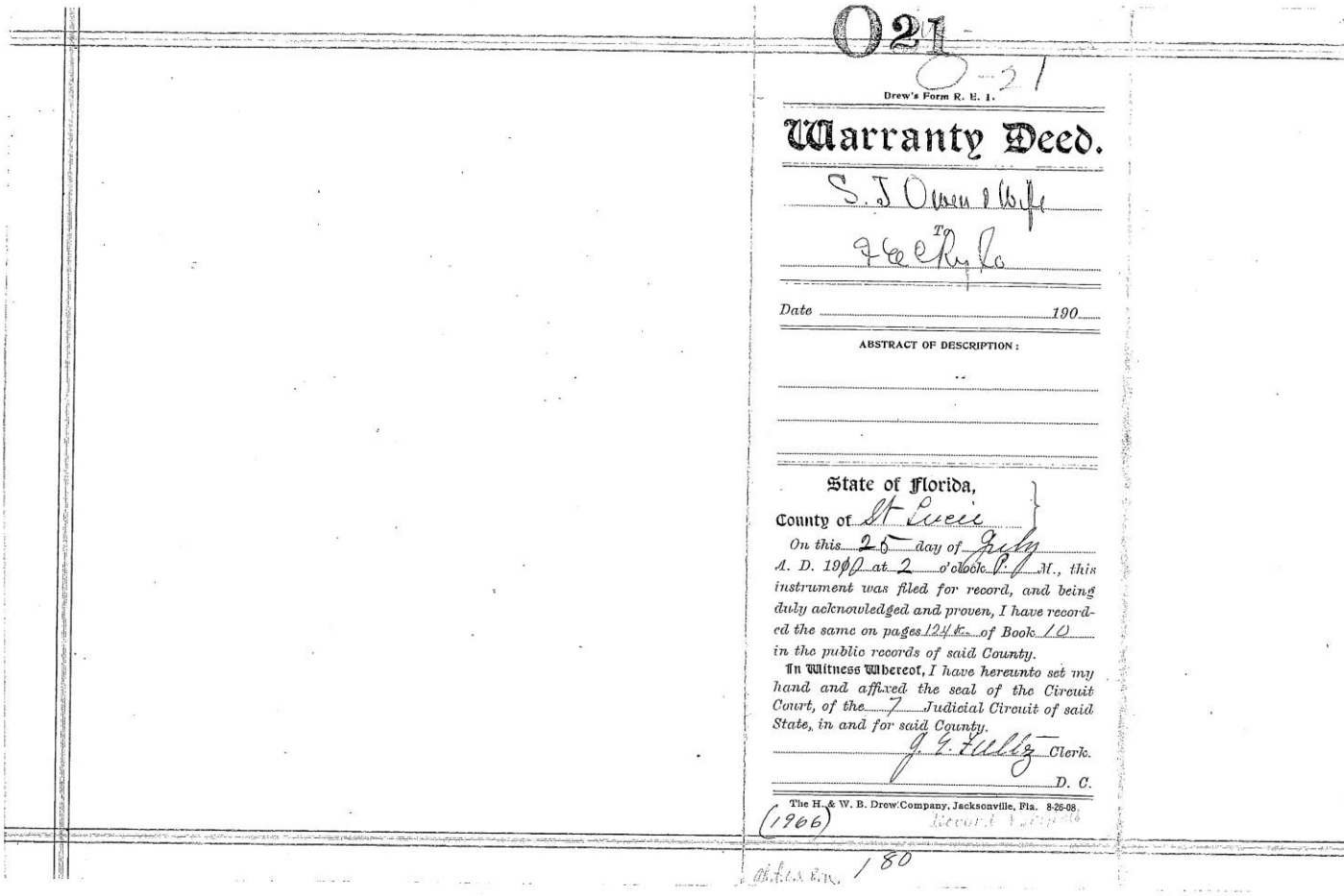
A. B. Lowery (Seal)

(Seal)

WARRANTY DEED. Drew's Form R. E. 14. Printed and for sale by The H. & W. B. Drew Company, Jacksonville, Fla. 9-25-08

This Indenture, Made the 23rd day of March, in the year of our Lord one thousand nine hundred and Nine, between A.B. Lowery and Sadie Lowery his wife of the County of St. Lucie and State of Florida, of the first part, and The Florida East Coast Railway Company, a corporation doing business in St. Lucie County, of the second part: Witnesseth, That the said parties of the first part, for and in consideration of the sum of Twelve Hundred ($1200.00) Dollars, lawful money of the United States of America, to them in hand paid by the said party of the second part at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, have granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents do grant, bargain, sell, alien, remise, release, convey and confirm unto the said party of the second part, and its ~~heirs~~ successors and assigns, forever, all that lot or parcel of land lying and being in the County of St. Lucie and State of Florida described as follows:

all that part of Lot Seven (7) of Tylers Subdivision of Government Lot Four (4) Section Ten (10) Township Thirty-five (35) South, Range Forty (40) East, lying West of the Florida East Coast Railway's Right of Way containing Two (2) acres, more or less.



O21

O-21

Drew's Form R. E. 1.

Warranty Deed.

S. J. Owen & Wife

To

F. E. C. Ry Co

Date ..... 190....

ABSTRACT OF DESCRIPTION:

State of Florida,

County of St Lucie

On this 25 day of July A. D. 1900 at 2 o'clock P. M., this instrument was filed for record, and being duly acknowledged and proven, I have recorded the same on pages 124 &c. of Book 10 in the public records of said County.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Circuit Court, of the 7 Judicial Circuit of said State, in and for said County.

J. E. Fultz Clerk.

D. C.

The H. & W. B. Drew Company, Jacksonville, Fla. 8-26-08.

(1966) Record Triplicate

Abstracted 180

State of Florida }
County of Duval } ss.

I Hereby Certify, That on this 22nd day of April A. D. 1910, before me personally appeared S. J. Owen and Kathleen R. Owen his wife, to me known to be the persons described in and who executed the foregoing conveyance to Florida East Coast Railway Company and severally acknowledged the execution thereof to be their free act and deed for the uses and purposes therein mentioned; and the said Kathleen R. Owen the wife of the said S. J. Owen on a separate and private examination taken and made by and before me, and separately and apart from her said husband, did acknowledge that she made herself a party to the said deed of conveyance for the purpose of renouncing, relinquishing and conveying all her right, title and interest, whether of dower or of separate property, statutory or equitable, in and to the lands therein described, and that she executed said deed freely and voluntarily and without any constraint, fear, apprehension or compulsion of or from her said husband.

Witness my signature and official seal at Jacksonville, in the county of Duval and State of Florida the day and year last aforesaid.

Margaret A. Cawsey (Seal)
Notary Public State of Florida at Large
My Commission Expires April 9, 1913.

State of }
County of } ss.

I, an officer authorized to take acknowledgments of deeds, Hereby Certify that

personally known to me to be the individual described in and who executed the foregoing instrument, and that said individual this day acknowledged before me that executed said instrument.

Witness my hand and official seal, this day of A. D. 190
(Seal) at in said County and State.

Together *with all and singular the* lands, easements, *tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; AND ALSO all the estate, right, title, interest, homestead, dower and right of dower, separate estate, property, possession, claim and demand whatsoever, at law and in equity, either and both, of the said part* ies *of the first part, of, in and to the same, and every part and parcel thereof; TO HAVE AND TO HOLD the above described premises, each and every, unto the said part* y *of the second part,* its successors *and assigns, in fee simple, absolute, indefeasibly, forever.*

And the said part ies *of the first part, for* themselves and their *heirs, executors and administrators, jointly and severally, covenant, promise and agree to and with the said part* y *of the second part,* its successors, ~~administrators~~ *and assigns, that the said part* ies *of the first part, at the time of the sealing and delivery of these presents,* are *lawfully seized in fee simple of a good, absolute and indefeasible estate of inheritance of and in all and singular the above described premises, each and every, and* have *good right, full power and lawful authority to convey the same in manner and form aforesaid; that the said part* y *of the second part,* its successors *and assigns, shall and may, at all times hereafter, peaceably and quietly have, hold, use, occupy, possess and enjoy the above described premises, and every part and parcel thereof, without any let, suit, trouble, molestation, eviction or disturbance of the said part* ies *of the first part,* their *heirs or assigns, or of any other person or persons lawfully claiming or to claim the same; that the same, all and singular, are free, clear, discharged and unincumbered of and from all former and other titles, clouds and incumbrances of what nature and kind soever; that the said part* ies *of the first part,* their *heirs, executors and administrators, each and every, shall make, execute and acknowledge such further and other deeds and assurances as by counsel learned in the law may be considered reasonably proper to effectuate the full intent and meaning of this instrument.*

And the said part ies *of the first part, for* themselves and their *heirs, the above described premises, and every part and parcel thereof, unto the said part* y *of the second part,* its successors *and assigns, against the said part* ies *of the first part, and* their *heirs, and against all and every person or persons whomsoever lawfully claiming or to claim the same shall and will warrant and by these presents forever defend.*

This alienation is with the joint consent of husband and wife, where that relation exists.

In Witness Whereof, *the said part* ies *of the first part* have *hereunto set* their *hands and seals each in the presence of two subscribing witnesses.*

Signed, sealed and delivered in presence of us:

Maynard H Ramsey	S. J. Aven (Seal)
Nathaniel Washington	Kathleen R Aven (Seal)
	(Seal)
	(Seal)

WARRANTY DEED. Drew's Form R. E. 1. Printed and for sale by The H. & W. B. Drew Company, Jacksonville, Fla. 8-26-08.

This Warranty Deed of Conveyance, *Executed this* 20th *day of* April *in the year of our Lord one thousand nine hundred and* ten (1910) *BY AND BETWEEN* S. J. Owen and wife Kathleen R. Owen, parties

of the first part, and Florida East Coast Railway Company, a Florida corporation, doing busines in the State of Florida and the County of St. Lucie. *of the second part,*

Witnesseth, *That the said part* ies *of the first part, for and in consideration of the sum of* One thousand Nine hundred fifty ($1950.00) *DOLLARS lawful money of the United States of America, to* them *in hand paid by the said part* y *of the second part, at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, by these presents* do *give, grant, bargain, sell, alien, enfeoff, remise, release, convey and confirm unto the said part* y *of the second part and* its successors ~~s~~ *that certain property in the County of* St. Lucie *and State of* Florida, *described as follows:* Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, and 22; of Owen's Addition to Fort Pierce, St. Lucie, County, Florida, acording to the plat recorded on the 23rd day of February, 1909, in plat book 1 at page 25, public rec rds of St. Lucie County, Florida. Said property being and comprising all that part lying west of the Florida East Coast Railway of Lot 5, and north 175 feet of lot 6 of Tylers subdivision of lot 4, Section 10, Township 35 South of range 40 east.

Subject however to a certain mortgage for the sum of $250.00 given on the 22nd day of April, 1909 by the said parties of the first part to J. S. Smart, which said mortgage the said second party herein assumes and agrees to pay.

It being the intention hereby to convey the same land as that conveyed to the said S. J. Owen by deed from J. S. Smart and wife, dated April 12, 1909, and recorded in Book 6 of deeds, at page 320, Brevard County Records, and the same property as that conveyed to said J. S. Smart by William F. Richards and others by deed dated October 29, 1901, and recorded in Book "KK" at page 221, Brevard County Records.

Also hereby conveying all right, title and interest, reversionary and otherwise, in and to all streets which appear on the plat of Owen's Addition to Fort Pierce, as recorded in Book 1, at page 25, February 23, 1909, and by any other plat affecting said lots, with the right to said Railway Company to close and occupy any and all such streets.

Florida East Coast RAILWAY, L.L.C.

Francis J. Chinnici
Senior Vice President
Engineering, Mechanical
and Purchasing

March 3, 2015

TO: City of Fort Pierce;
St. Lucie County Fire District;
South Florida Water Management District
St. Lucie County Health Department

RE: Rocla Crosstie Facility

On behalf of **Florida East Coast Railway (FEC)**, we hereby authorize Rocla Concrete Tie, Inc. to act as our agent relative to agency approvals and permits for the above referenced property and project.

Florida East Coast Railway (FEC)

By: _____ FRANCIS J. CHINNICI SVP ENG, MECH & PURCHASING 3-18-15
Signature Print name Title Date

STATE OF FLORIDA
COUNTY OF ST. LUCIE

The foregoing instrument was acknowledged before me this 18th day of March, 2015 by for Florida East Coast Railway (FEC), who is personally known/provided identification to me on behalf of Florida East Coast Railway (FEC).

[Notary Seal or Stamp]

_____
Notary Public-State of Florida
Print Name: Mary T. GRIFFIN
My Commission Expires: 8/20/18

MARY T GRIFFIN
MY COMMISSION #FF148473
EXPIRES August 20, 2018
(407) 398-0153 FloridaNotaryService.com

7150 Philips Highway, Jacksonville, FL 32256
904-279-3119

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

March 19, 2015

TO: City of Fort Pierce;
St. Lucie County Fire District; and
South Florida Water Management District
St. Lucie County Health Department

RE: Rocla Crosstie Facility

On behalf of **Rocla Concrete Tie, Inc**, we hereby authorize Bill (Rusty) Croley of Rocla Concrete Tie, Inc. and Stefan Matthes P.E. of Culpepper & Terpening, Inc. to act as our agents relative to agency approvals and permits for the above referenced property and project.

Rocla Concrete Tie, Inc.

By: Peter Urquhart Presdent 3/19/2015
Signature Print name Title Date

STATE OF COLORADO
COUNTY OF JEFFERSON

The foregoing instrument was acknowledged before me this 19th day of March, 2015 by Peter Urquhart as a registered agent, for Rocla Concrete Tie, Inc who is personally known/provided identification to me on behalf of Rocla Concrete Tie, Inc.

[Notary Seal or Stamp]

IANA MCMORRIS
Notary Public
State of Colorado

Notary Public-State of Colorado
Print Name: Iana McMorris
My Commission Expires: 05/29/2016

1819 Denver West Drive, Suite 450
Lakewood, CO 80401
Tel (303) 296 3500
www.roclatie.com

Document must be filed electronically.
Paper documents are not accepted.
Fees & forms are subject to change.
For more information or to print copies
of filed documents, visit www.sos.state.co.us.

E-Filed

Colorado Secretary of State
Date and Time: 11/03/2014 08:50 AM
ID Number: 20031277189

Document number: 20141675046
Amount Paid: $60.00

ABOVE SPACE FOR OFFICE USE ONLY

Periodic Report

filed pursuant to §7-90-301, et seq. and §7-90-501 of the Colorado Revised Statutes (C.R.S)

ID number: 20031277189

Entity name: ROCLA CONCRETE TIE, INC.

Jurisdiction under the law of which the entity was formed or registered: Texas

1. Principal office street address:
1819 Denver West Dr. *(Street name and number)*
Suite 450
Lakewood *(City)* CO *(State)* 80401 *(Postal/Zip Code)*
(Province – if applicable) United States *(Country – if not US)*

2. Principal office mailing address: (if different from above)
(Street name and number or Post Office Box information)
(City) *(State)* *(Postal/Zip Code)*
(Province – if applicable) *(Country – if not US)*

3. Registered agent name: (if an individual) URQUHART *(Last)* PETER *(First)* A. *(Middle)* *(Suffix)*

or (if a business organization)

4. The person identified above as registered agent has consented to being so appointed.

5. Registered agent street address:
1819 Denver West Dr. *(Street name and number)*
Suite 450
Lakewood *(City)* CO *(State)* 80401 *(Postal/Zip Code)*

6. Registered agent mailing address: (if different from above)
(Street name and number or Post Office Box information)
(City) *(State)* *(Postal/Zip Code)*
(Province – if applicable) *(Country – if not US)*

REPORT Page 1 of 2 Rev. 12/01/2012

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

Notice:
Causing this document to be delivered to the secretary of state for filing shall constitute the affirmation or acknowledgment of each individual causing such delivery, under penalties of perjury, that the document is the individual's act and deed, or that the individual in good faith believes the document is the act and deed of the person on whose behalf the individual is causing the document to be delivered for filing, taken in conformity with the requirements of part 3 of article 90 of title 7, C.R.S., the constituent documents, and the organic statutes, and that the individual in good faith believes the facts stated in the document are true and the document complies with the requirements of that Part, the constituent documents, and the organic statutes.

This perjury notice applies to each individual who causes this document to be delivered to the secretary of state, whether or not such individual is named in the document as one who has caused it to be delivered.

7. Name(s) and address(es) of the individual(s) causing the document to be delivered for filing:

McMahan	Desiree	M.	
(Last)	*(First)*	*(Middle)*	*(Suffix)*

1819 Denver West Dr.
(Street name and number or Post Office Box information)

Suite 450

Lakewood	CO	80401
(City)	*(State)*	*(Postal/Zip Code)*

	United States
(Province – if applicable)	*(Country – if not US)*

(The document need not state the true name and address of more than one individual. However, if you wish to state the name and address of any additional individuals causing the document to be delivered for filing, mark this box ☐ *and include an attachment stating the name and address of such individuals.)*

Disclaimer:
This form, and any related instructions, are not intended to provide legal, business or tax advice, and are offered as a public service without representation or warranty. While this form is believed to satisfy minimum legal requirements as of its revision date, compliance with applicable law, as the same may be amended from time to time, remains the responsibility of the user of this form. Questions should be addressed to the user's attorney.

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE

I, Wayne W. Williams, as the Secretary of State of the State of Colorado, hereby certify that, according to the records of this office,

ROCLA CONCRETE TIE, INC.

is an entity formed or registered under the law of **Texas** has complied with all applicable requirements of this office, and is in good standing with this office. This entity has been assigned entity identification number 20031277189.

This certificate reflects facts established or disclosed by documents delivered to this office on paper through 03/16/2015 that have been posted, and by documents delivered to this office electronically through 03/17/2015 @ 09:17:20.

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, authenticated, issued, delivered and communicated this official certificate at Denver, Colorado on 03/17/2015 @ 09:17:20 pursuant to and in accordance with applicable law. This certificate is assigned Confirmation Number 9126697.

Secretary of State of the State of Colorado

**********End of Certificate**********

Notice: A certificate issued electronically from the Colorado Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Confirmation Page of the Secretary of State's Web site, http://www.sos.state.co.us/biz/CertificateSearchCriteria.do entering the certificate's confirmation number displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate. For more information, visit our Web site, http://www.sos.state.co.us/ click Business Center and select "Frequently Asked Questions."

CERT_GS_F Revised 08/20/2008



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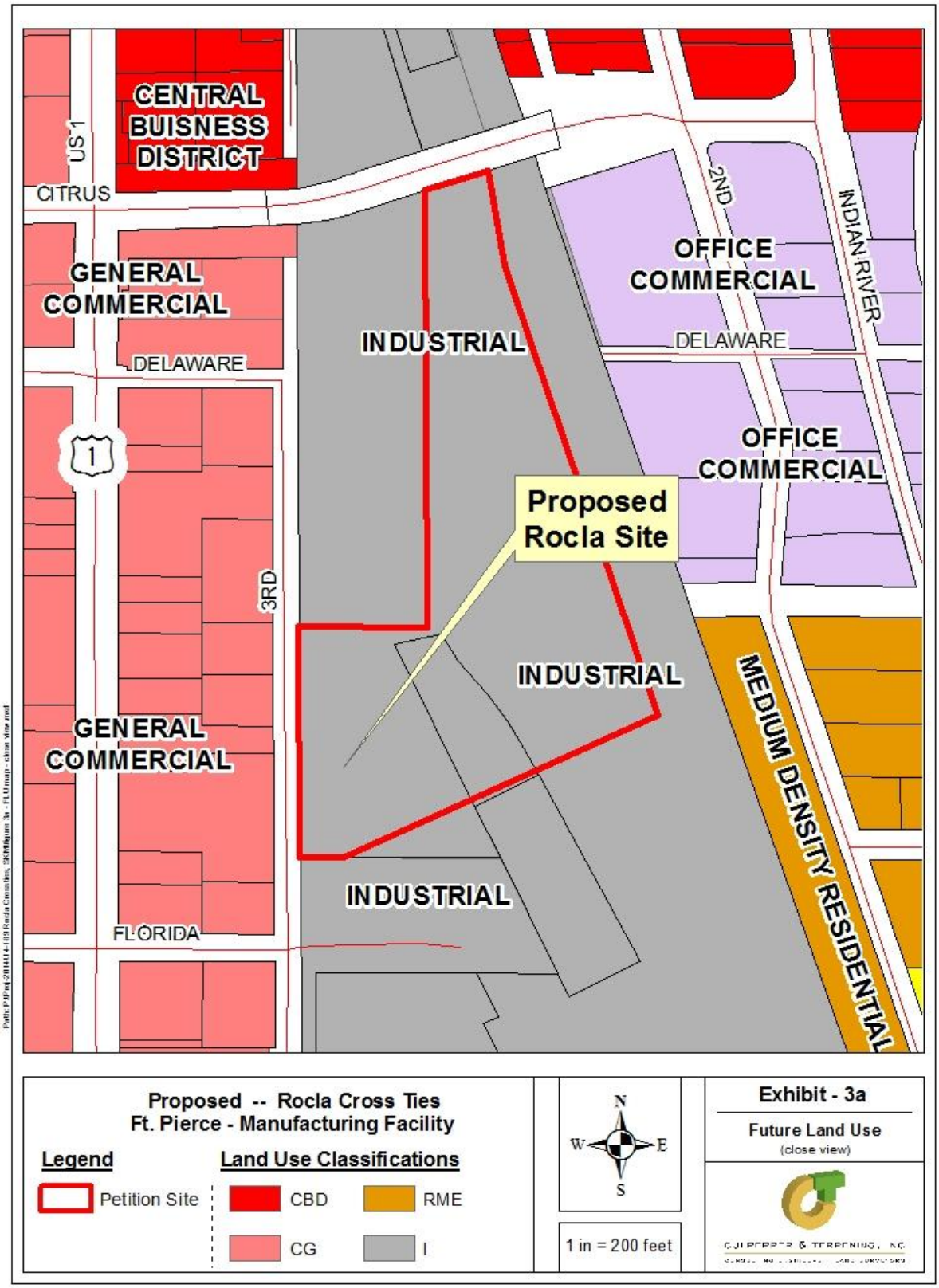
~~Strike Through~~ is for Deletion from prior submission



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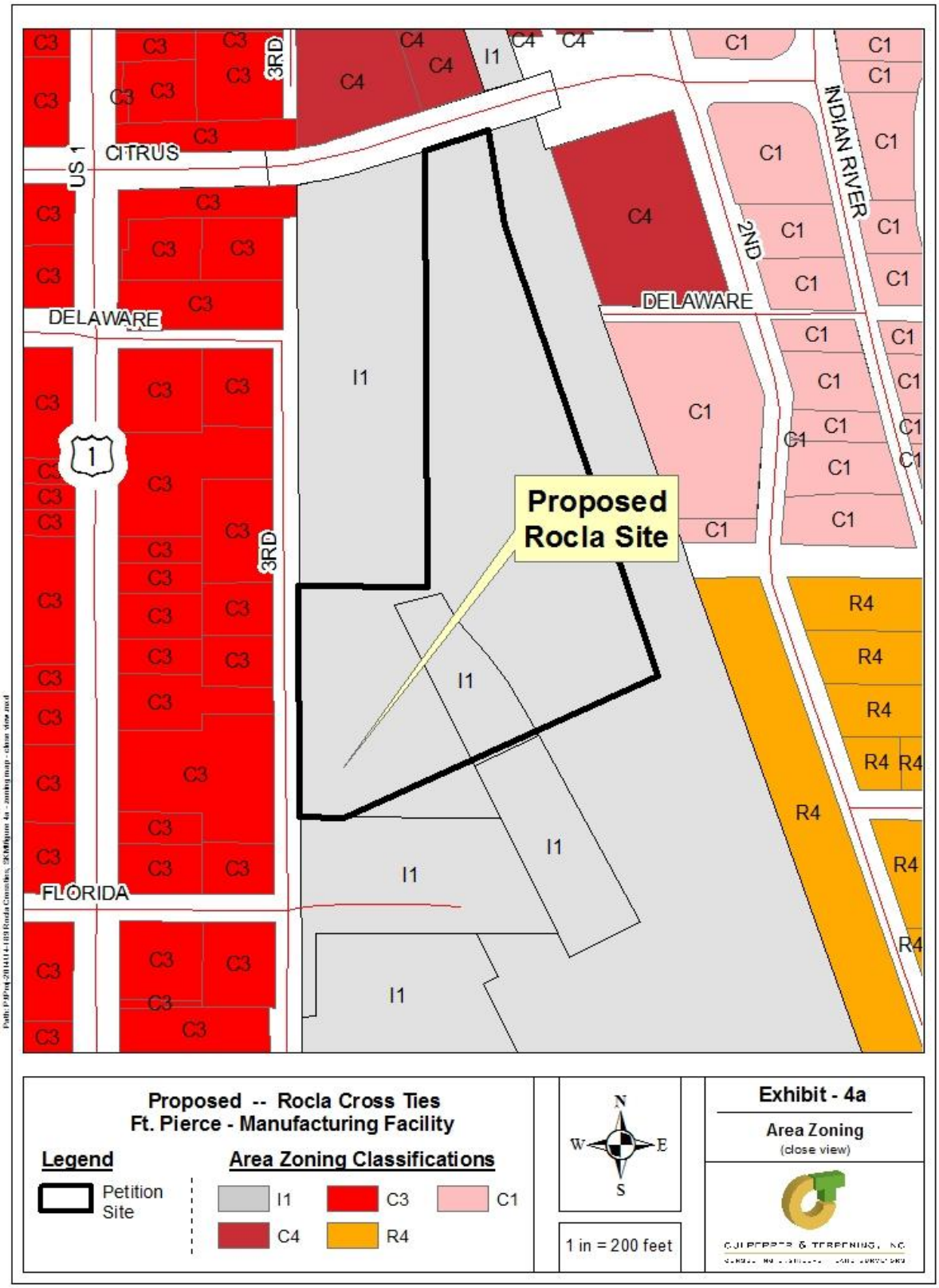

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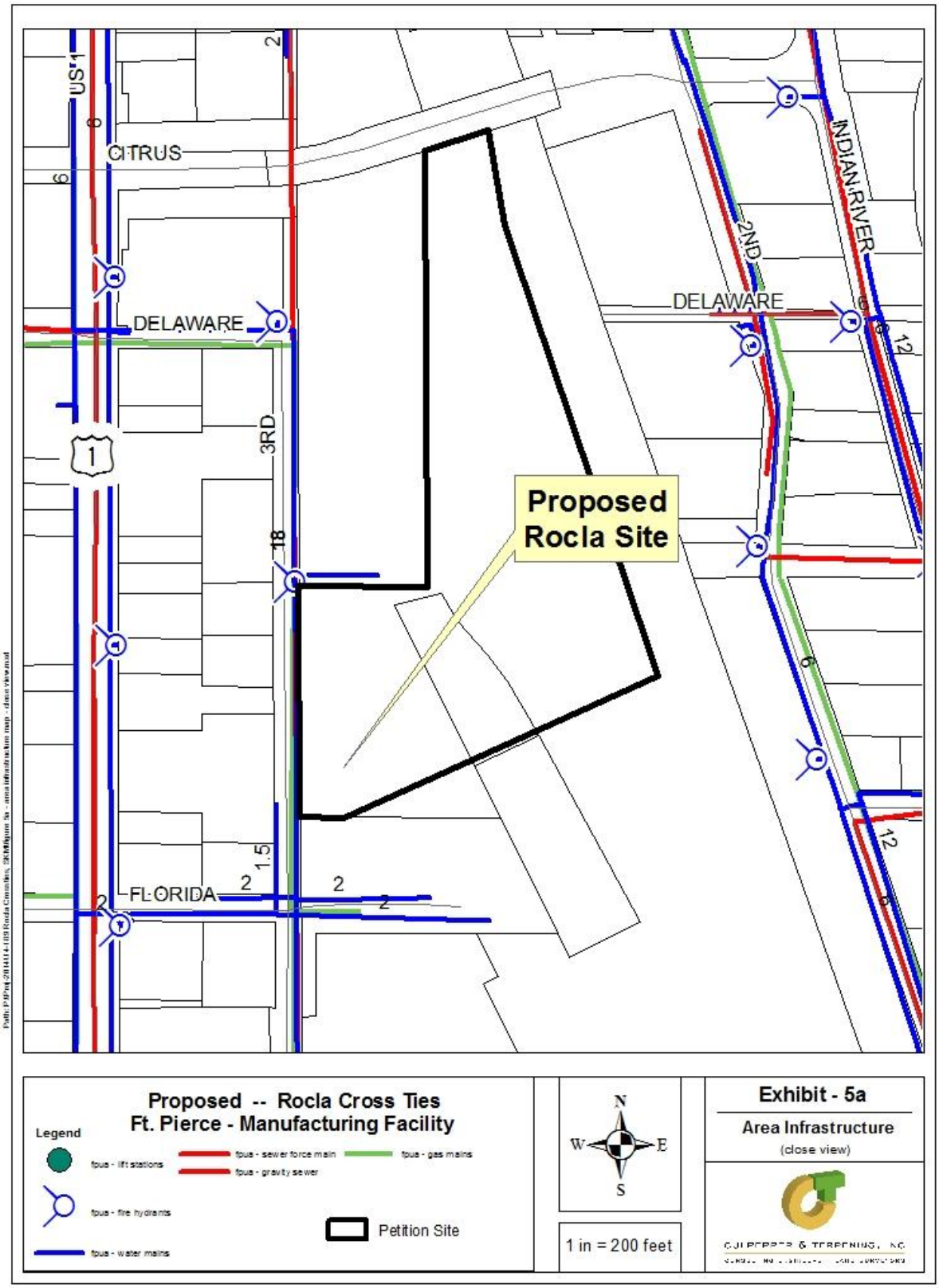
US 1
CITRUS
DELAWARE
3RD
FLORIDA
2ND
INDIAN RIVER
Proposed
Rocla Site
Proposed -- Rocla Cross Ties
Ft. Pierce - Manufacturing Facility
Legend
fpua - lift stations
fpua - sewer force main
fpua - gas mains
fpua - gravity sewer
fpua - fire hydrants
fpua - water mains
Petition Site
N
W
E
S
1 in = 200 feet
Exhibit - 5a
Area Infrastructure
(close view)

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SECTION IV

PETITION FOR CHANGE IN ZONING TO PLANNED DEVELOPMENT (PD) ZONING DISTRICT

GENERAL STANDARDS FOR PD APPROVAL

(b) The planned development (PD) district is designed to allow an applicant to submit a proposal for consideration, for any use or any mixture of uses, the approval of planned development rezoning rests with the city commission. However, no rezoning or development plan may be approved unless the following conditions are met:

(1) Comprehensive plan consistency. Any residential, commercial, industrial, or public land uses and structures are permitted in this district, provided the proposed development is shown to be consistent with the goals, objectives and policies of the comprehensive plan, and consistent with the future land use element, and the standards and criteria contained in the following sections, unless a corresponding amendment to the comprehensive plan is also adopted.

a. Density. In no event shall the density granted exceed the maximum gross density permitted under the underlying land use in the comprehensive plan.

The proposed Rocla Crosstie Planned Development District (PD-Rocla), is to be used for industrial purposes consistent with the petition properties Future Land Use designation of I (Industrial). The non-residential FAR intensity of the proposed development site does not exceed 1.5, as described in Policy 1.1.2 of the Future Land Use Element of the City's Comprehensive plan. There is no residential density assigned to this property

(2) Perimeter setbacks. Setbacks at the perimeter of the development shall be equal to those of the abutting zoning district(s), except where city commission finds that alternate perimeter setbacks would be appropriate. Conditions under which alternate perimeter setbacks may be considered include, but are not limited to, the following:

a. Property in the abutting zoning district is located across a major roadway from the PD, and therefore, a reduced setback would have little or no impact on the character of the adjacent property;

b. The minimum PD perimeter setback required by this section cannot be achieved due to an exceptional narrowness, shallowness, shape, topographic condition or physical or environmental feature uniquely affecting the subject property.

The proposed perimeter setbacks for the proposed Rocla Crosstie Planned Development District (PD-Rocla) are as follows:

- Front (South 3rd Street): 15 feet
- Side: 15 feet
- Rear: 0 feet

These setbacks are all greater than the surrounding minimum property setbacks.

(3) Open space. In all planned developments at least twenty (20) per cent of the site shall be devoted to open space, regardless of project size or intended use; it may include vegetated areas or urban areas unencumbered by an impervious surface, but shall exclude aquatic areas.

The proposed Rocla Crosstie Planned Development District (PD-Rocla) site totals 7.18 acres (more or less). Total open space on this site totals just under 64,000 square feet, or 20.0% of the overall project site. There is no area of the project site defined as "aquatic area."

(4) Applicability to other LDRs. All building code, housing code, and other land use regulations of the City of Fort Pierce are applicable to the PD district.

Except as otherwise addressed through this Planned development submission, the proposed Rocla Crosstie Planned Development District (PD-Rocla) will comply with all applicable City codes and standards.

(5) Easements. Easements necessary for the orderly extension and maintenance of public utilities and/or other special needs may be required as a condition of approval.

The proposed Rocla Crosstie Planned Development District (PD-Rocla) will provide all required easements necessary for the orderly extension and maintenance of public utilities and/or other special needs associated with the proposed development plan. The conveyance of all required easements will be done concurrent with application for local building permits.

(6) Phasing. When provisions for phasing are included in the development plan, each phase of development must be so planned and so related to previous development, surrounding properties, and the available public facilities and services, that failure to proceed with subsequent phases will not adversely impact drainage, utilities, parking or the traffic flow of the completed phases.

The proposed Rocla Crosstie Planned Development District (PD-Rocla) will be constructed in one phase.

(7) Other standards. All planned developments will comply with regulations affecting signs referred to in section 22-55 and applicable portions of the city's regulations governing subdivisions except that in case of conflict.

The proposed Rocla Crosstie Planned Development District (PD-Rocla) will comply with sign standards as set out in Chapter 15 of the City of Ft. Pierce Code of Ordinances, except as follows:

Sign Regulation.

(a) On-Premises Signs (General):

1.) Wall Signs:

a. Shall not extend more than eighteen (18) inches from the wall or facade of the building to which they are attached.

b. Shall not extend more than twenty-four (24) inches above the roof or parapet of a building, whichever is greater.
c. Shall be located on the main street wall face of the establishment or building they identify except that up to fifty (50) per cent of such permitted sign area may be located on other wall faces.
d. Shall be adequately constructed and securely anchored in accordance with the requirements of Chapter 23 of the Standard Building Code.

2.) Projecting Signs:
a. Not permitted

3.) Ground Signs:
a. Maximum Height - fifteen (15) feet.
b. Ground Signs shall not be located less than five (5) feet from any public right-of-way line, adjacent property line, or structure.
c. Ground Signs shall provide a vertical clearance of not less than nine (9) feet over any pedestrian walkway or fourteen (14) feet over any vehicular driveway.
d. Ground Signs shall be adequately constructed and securely anchored in accordance with the requirements of the Florida Building Code.
e. Ground Signs shall have a landscaped area around the base of the sign which extends a minimum distance of three (3) feet in all directions. Such landscaped area shall be completely covered by ground cover and shrubs, hedges or similar vegetative materials. Vegetation in the area surrounding said sign shall be maintained at a height of less than twelve (12) inches.
f. Ground Signs shall conform to the clear vision areas of Section 22-53 of the City of Ft. Pierce Code of Ordinances, with support structures limited to a maximum two (2) feet in diameter.

(b) Permitted temporary signs.
1.) Construction project signs. Construction project signs:
a. Shall be limited to one sign per active construction project.
b. Shall not exceed 64 square feet in sign area.
c. May contain the name of the project, contractor, subcontractor, architect, developer, supplier or financial institution.
d. Shall not be erected prior to the issuance of a building permit and shall be removed prior to the issuance of a certified of occupancy.
e. Shall not be illuminated.

(c) Permitted permanent signs.
1) One wall sign, which shall not exceed a sign area equal to twenty (20) per cent of the total wall face area fronting on the main street.

2) One ground sign, which shall not exceed a sign area equal to 1 square foot for 2 feet of main street frontage, up to a maximum of 100 square feet of sign area.

3) Directional signs, which shall not exceed six (6) square feet in sign area, may be installed as needed.

(d) Permit Procedures.

1) All sign permitting shall be consistent with the provisions of Section 15-9, Ft. Pierce City Code of Ordinances, as may be amended.

(8) Additional requirements. The city commission may also establish additional requirements which it considers necessary to assure that a planned development conforms to the intent of this section.

To be determined.

(9) Variances are not necessary. The specific development standards of the PD district are contained in the approved development plan for each planned development which normally takes into account those matters which might otherwise be the subject of variance review by the board of adjustment.

Position acknowledged.

[go to next page]

(c) Application requirements. When an application is submitted to rezone property to a PD zoning district, the following items will be submitted in addition to other information submitted in accordance with section 22-127, the city's subdivision regulations or other city laws:

(1) Written documents:

a. Project narrative: A statement describing the planned development. This statement should include a description of the character of the proposed development as it relates to the development objectives of the city and the city's comprehensive plan as well as the applicant's intentions with regard to the future selling or leasing of all or portions of the planned development, such as land areas and dwelling units.

The proposed *Rocla Crosstie Planned Development District* (PD-Rocla) is for the purpose of constructing a concrete railroad tie manufacturing facility, that will be located on a 7.18 acre tract of land owned by the Florida East Coast Railroad (FEC) (Parcel ID 2410-805-0005-000-1 (part of) and 2410-811-0001-030-1), and subject to lease agreement with Rocla Concrete Tie, Inc. The proposed manufacturing facility will be located along the east side of South 3rd Street, just south of the Citrus Avenue overpass, between the existing CEMEX/Rinker Concrete production plant and the existing FEC Ft. Pierce Terminal.

The proposed site will be situated such that the buildings will occupy the southwest section of the property, with the eastern portion of the property, the area adjacent to the FEC rail tracks, used for the short term storage of completed rail crosstie product. The completed rail ties will be shipped from the Rocla facility, via the FEC rail tracks, to service locations throughout the Southeast United States.

The subject parcel can be best described as being, an impacted urban site that has been altered from previous activity. The site has been previously disturbed and there are no remaining native ecosystems on the site. There are no wetlands or significant topographic features on the subject site.

The proposed manufacturing buildings will be prefabricated, metal buildings, with an aesthetic façade along its western exposures. This primary manufacturing building will house all of the mechanical components of the manufacturing process and will be soundproofed to ensure compliance with the City's noise control regulations. There will also be a small office building that will accommodate the administrative support services for this new manufacturing activity. The manufacturing building will have an overall dimension of 90' wide by 220' long, and will have a maximum height of 38' at its peak. The maximum height of the materials storage bin is 50 feet.

Raw materials will be primarily shipped to the project site via truck, however from time to time and depending on production needs, rail side delivery may also be used. The FEC will construct/upgrade a separate rail spur to the Rocla site, specifically for the limited transport of materials into and export/shipping out of the final product. The finished product from this facility is intended for heavy rail use and the most effective way to transport this material to the various localities where they are needed is, by rail. Vehicular access to the proposed manufacturing facility will be from an existing driveway along/onto South 3rd Street. This existing turnouts and driveway widths are adequate to provide access for large vehicles entering and exiting the site.

The proposed development site will provide the required setbacks for the proposed activity. The perimeter will be landscaped as required by the City Codes. The proposed administrative office structure will be landscaped with palms and foundation hedging.

b. Unified control: Material which presents firm evidence of unified control of the entire area within the proposed planned development in a manner approved by the city attorney.

The petition property is owned by the Florida East Coast railroad, and will be subject to a lease with the Rocla Concrete Tie, Inc.

c. Phasing: A development phasing schedule indicating:

1. The approximate date when construction of the project can be expected to begin.

2. The number of phases in which the project will be built and the approximate date when construction of each phase can be expected to begin and completed.

3. A general description of the buildings and streetscapes including standards for height, building coverage, parking areas, and public improvements proposed for each phase of the development.

Site construction is expected to begin in late summer/fall 2015.

The proposed *Rocla Crosstie Planned Development District (PD-Rocla)* will be constructed in one phase.

The following design elements have been integrated into the building and site designs to buffer offsite views, internal noise generation, and to give the project curb appeal, and visual identity as a City landmark building.

- Architecturally embellished Pre-Engineered Metal Building.
- Building will have an industrial appearance to compliment with adjacent structures, while enhancing the overall street frontage.
- Utilize light blue metal siding and roofing to soften the mass of the structure against the sky and horizon.
- Artisan cement panels at entrance gate.
- Varying height masonry base knee walls with stucco face and reveal marker control joints at both the Admin Office Building and main Manufacturing Building.
- Decorative geometric ceramic tile in-lays in color to complement the Owner's signage panel.
- Decorative chippendale aluminum grilles to create positive relief from the large flat facade facing West.
- Building overhangs will be bracketed with decorative aluminum columns at West Elevations.
- Two color stucco base knee wall.
- Garden fence of masonry and stucco to unify the two buildings at the West Elevation, control sound transmission and create a progression of vertical scale as a transitional space and focal entry adjacent to the interior courtyard.
- Tall 3-level palms framing the West building facade corners to scale down the verticality of the main building.
- Landscaping at base of garden fence to reduce heat island effect and add 3'd color element to composition.

- Perimeter and interior landscaping with trees and shrubs to shade the site and help with site acoustics.

d. Quantitative data for the following: Total number and type of dwelling units; parcel sizes; proposed lot coverage of buildings and structures; residential gross densities; total amount of open space; and the total amount of nonresidential acreage (including a separate figure for commercial and industrial acreage).

Total Number and Type of Dwelling Units; N/A
Parcel Sizes; 7.18 acres
Proposed Lot Coverage Of Buildings And Structures;

	% of site	acreage	sq feet	% of site
Buildings		0.45	19,475	6%
Roadways/Parking		1.22	53,175	17%
Other		0.37	16,226	5%
Open Space		1.47	63,951	20%
Laydown storage		2.95	128,587	41%
Dry Detention		0.72	31,272	10%
Totals		7.18	312,686	100%

(all areas are approximate and are subject to change as part of final construction designs.)

Residential Gross Densities; N/A
Total Amount of Open Space; 1.47 acres
Total Amount of Nonresidential Acreage
Commercial 0 acres
Industrial 7.18 acres

e. A list of any exceptions from the standard zoning ordinance and land development code for any features of the proposed development plan.

None.

g. Agreements, provisions and covenants which govern the use, maintenance and continued protection of the planned development and any of its common open space or other shared areas. This material shall include material which binds successors in title to any commitments concerning completion of the project and its maintenance and operation.

None.

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SECTION V

PETITION FOR CHANGE IN ZONING TO PLANNED DEVELOPMENT ZONING DISTRICT

SITE PLAN

a. The existing site conditions, shorelines, flood plains, unique natural features and forest cover.

The subject parcel can be best described as an impacted urban site that has been altered from previous activity. The site has been previously disturbed and there are no remaining native ecosystems on the site.

The predominant vegetation found on the site is Brazilian Pepper with a scattering of cabbage palm, together with vines and herbaceous weeds. No significant native trees exist on the site.

There are no wetlands or significant topographic features on the subject site.

The project site is located in Flood Zone X, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Number 12111C0179J dated February 16, 2012.

b. A landscape and irrigation plan per chapter 22-59 LDC.

See attached graphics.

c. Proposed lot lines and other divisions of land for management, use or allocation purposes.

See attached graphics. The subject site (lease area) is not proposed to be further divided or platted.

d. The location, size and height of present and proposed buildings and structures.

See attached graphics. There are no existing buildings or structures on the proposed development site.

The proposed manufacturing buildings will be prefabricated, metal buildings, with an aesthetic façade along its western exposures. This primary manufacturing building will house all of the mechanical components of the manufacturing process and will be soundproofed to ensure compliance with the City's noise control regulations. There will also be a small office building that will accommodate the administrative support services for this new manufacturing activity. The manufacturing building will have an overall dimension of 90' wide by 220' long, and will have a maximum height of 38' at its peak. The maximum height of the materials storage bin is 50 feet.

e. The location and size of all areas proposed to be conveyed, dedicated or reserved for streets, parks, playgrounds, public and semi-public buildings and similar uses.

See attached graphics. A ten-foot (10') right-of-way reservation has been provided along the east side of South 3rd Street for future uses by the City of Ft. Pierce

f. The existing and proposed vehicular circulation system, including off-street parking and loading areas.

See attached graphics.

g. The pedestrian circulation system, including its interrelationships with the vehicular circulation system, within the development to adjacent streets, showing all curb cuts and sidewalks.

See attached graphics.

h. The existing and proposed utility systems, including sanitary sewers, storm sewers and water, electric and gas lines.

See attached graphics.

i. Information on land areas adjacent to the proposed planned development, including land uses, zoning classifications, densities, circulation systems, public facilities and unique natural features of the landscape.

See attached graphics.

j. The proposed buffering treatment of the perimeter of the planned development, refuse stations, storage areas, or loading areas, including materials and techniques used such as screens, fences and walls.

See attached graphics.

k. The location of existing wetlands, proposed preservation and conservation areas.

There are no areas of existing wetlands, proposed preservation or conservation areas on the proposed development site.

l. A statement describing any endangered or threatened species that may be located on the site and potential environmental impacts on flora and fauna.

The historic native ecosystem is no longer present on the site. The predominant vegetation is that typically found on impacted areas and consists primarily of Brazilian Pepper. Cabbage Palm are randomly found on the site together with vines and herbaceous weeds. No significant native trees exist on the site.

As part of the environmental review of this site, one Gopher Tortoise has been located and as part of the development of the property, will be relocated to a new offsite location.

There are no wetlands or significant topographic features on the subject site.

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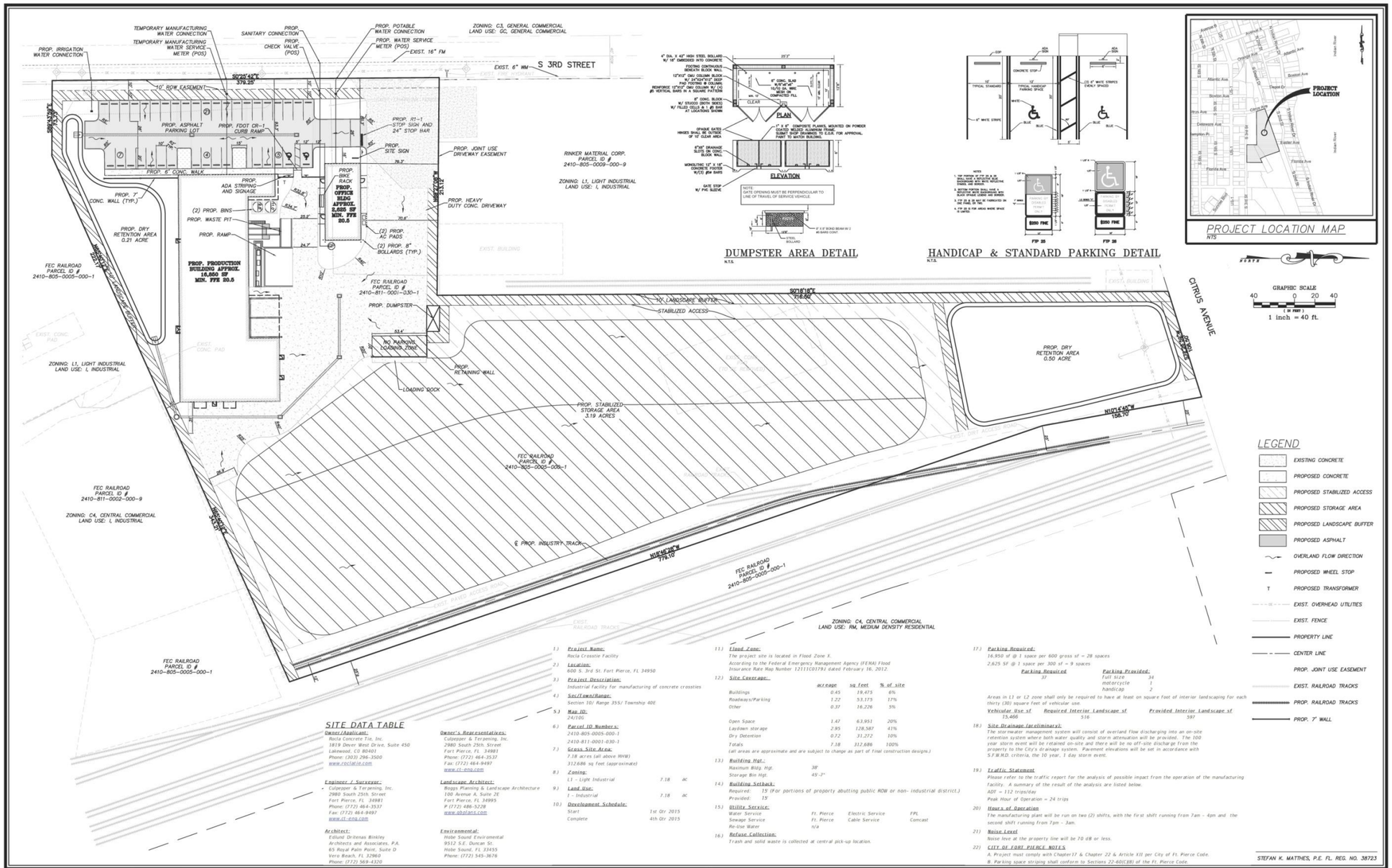

SITE DATA TABLE

Owner/Applicant:
Rocla Concrete Tie, Inc.
1819 Dever West Drive, Suite 450
Lakewood, CO 80401
Phone: (303) 296-3500
www.roclatie.com

Engineer / Surveyor:
Culpepper & Terpening, Inc.
2980 South 25th. Street
Fort Pierce, FL 34981
Phone: (772) 464-3537
Fax: (772) 464-9497
www.ct-eng.com

Architect:
Edlund Dritenas Binkley
Architects and Associates, P.A.
65 Royal Palm Point, Suite D
Vero Beach, FL 32960
Phone: (772) 569-4320

Owner's Representatives:
Culpepper & Terpening, Inc.
2980 South 25th. Street
Fort Pierce, FL 34981
Phone: (772) 464-3537
Fax: (772) 464-9497
www.ct-eng.com

Landscape Architect:
Boggs Planning & Landscape Architecture
100 Avenue A, Suite 2E
Fort Pierce, FL 34995
P (772) 486-5228
www.abplans.com

Environmental:
Hobe Sound Environmental
9512 S.E. Duncan St.
Hobe Sound, FL 33455
Phone: (772) 545-3676

1) **Project Name:** Rocla Crosstie Facility
2) **Location:** 600 S. 3rd St. Fort Pierce, FL 34950
3) **Project Description:** Industrial facility for manufacturing of concrete crossties
4) **Sec/Town/Range:** Section 10/ Range 35S/ Township 40E
5) **Map ID:** 247/10.
6) **Parcel ID Numbers:** 2410-805-0005-000-1; 2410-811-0001-030-1
7) **Gross Site Area:** 7.18 acres (all above HHW); 312,686 sq feet (approximate)
8) **Zoning:** I1 - Light Industrial 7.18 ac
9) **Land Use:** I - Industrial 7.18 ac
10) **Development Schedule:** Start 1st Qtr 2015; Complete 4th Qtr 2015
11) **Flood Zone:** The project site is located in Flood Zone X. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Number 12211C0179J dated February 16, 2012.
12) **Site Coverage:**

	acreage	sq feet	% of site
Buildings	0.45	19,475	6%
Roadways/Parking	1.22	53,175	17%
Other	0.31	16,226	5%
Open Space	1.47	63,951	20%
Laydown storage	2.95	128,587	41%
Dry Detention	0.72	31,272	10%
Totals	7.18	312,686	100%

(all areas are approximate and are subject to change as part of final construction designs.)

13) **Building Hgt.:** Maximum Bldg. Hgt. 38'; Storage Bin Hgt. 45'-7"
14) **Building Setback:** Required: 15 (For portions of property abutting public ROW or non- industrial district.) Provided: 15
15) **Utility Service:**

Water Service	Ft. Pierce	Electric Service	FPL
Sewage Service	Ft. Pierce	Cable Service	Comcast
Re-Use Water	n/a		

16) **Refuse Collection:** Trash and solid waste is collected at central pick-up location.
17) **Parking Required:** 16,950 sf @ 1 space per 600 gross sf = 28 spaces; 2,625 SF @ 1 space per 300 sf = 9 spaces

Parking Required	Parking Provided:	
37	full size	34
	motorcycle	1
	handicap	2

Areas in L1 or L2 zone shall only be required to have at least on square foot of interior landscaping for each thirty (30) square feet of vehicular use.

Vehicular Use sf	Required Interior Landscape sf	Provided Interior Landscape sf
15,468	516	597

18) **Site Drainage (preliminary):** The stormwater management system will consist of overland flow discharging into an on-site retention system where both water quality and storm attenuation will be provided. The 100 year storm event will be retained on-site and there will be no off-site discharge from the property to the City's drainage system. Pavement elevations will be set in accordance with S.F.W.M.D. criteria, the 10 year, 1 day storm event.
19) **Traffic Statement** Please refer to the traffic report for the analysis of possible impact from the operation of the manufacturing facility. A summary of the result of the analysis are listed below. ADT = 112 trips/day; Peak Hour of Operation = 24 trips
20) **Hours of Operation** The manufacturing plant will be run on two (2) shifts, with the first shift running from 7am - 4pm and the second shift running from 7pm - 3am.
21) **Noise Level** Noise leve at the property line will be 70 dB or less.
22) **CITY OF FORT PIERCE NOTES**
A. Project must comply with Chapter17 & Chapter 22 & Article XII per City of Ft. Pierce Code.
B. Parking space striping shall conform to Sections 22-60(C)(8) of the Ft. Pierce Code.

STEFAN K. MATTHES, P.E. FL. REG. NO. 38723

NOTES:
1) ALL ELEVATIONS AND BENCHMARKS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) OF 1988.

COMPUTER FILE REF.	FIELD BK./PG.
14-189 boss.dwg	

CULPEPPER & TERPENING, INC
CONSULTING ENGINEERS | LAND SURVEYORS
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE: 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
151 SW FLAGLER AVENUE • STUART, FLORIDA 34994
PHONE: 772-220-3376 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA CERTIFICATION No. LB 4286

– REVISIONS –	BY	DATE
REVISED PER CFP TRC COMMENTS	JK	05-18-15

	BY	DATE
FIELD CALCS.		
DRAWN	JK	12-15-14
DETAILED		
CHECKED	SKM	05-18-15
APPROVED		

SITE PLAN

ROCLA CROSSTIE FACILITY

DATE: 04-02-2015
HORIZ. SCALE: 1"=40'
VERT. SCALE: N\A
JOB No. 14-189
SHEET 1 OF 1

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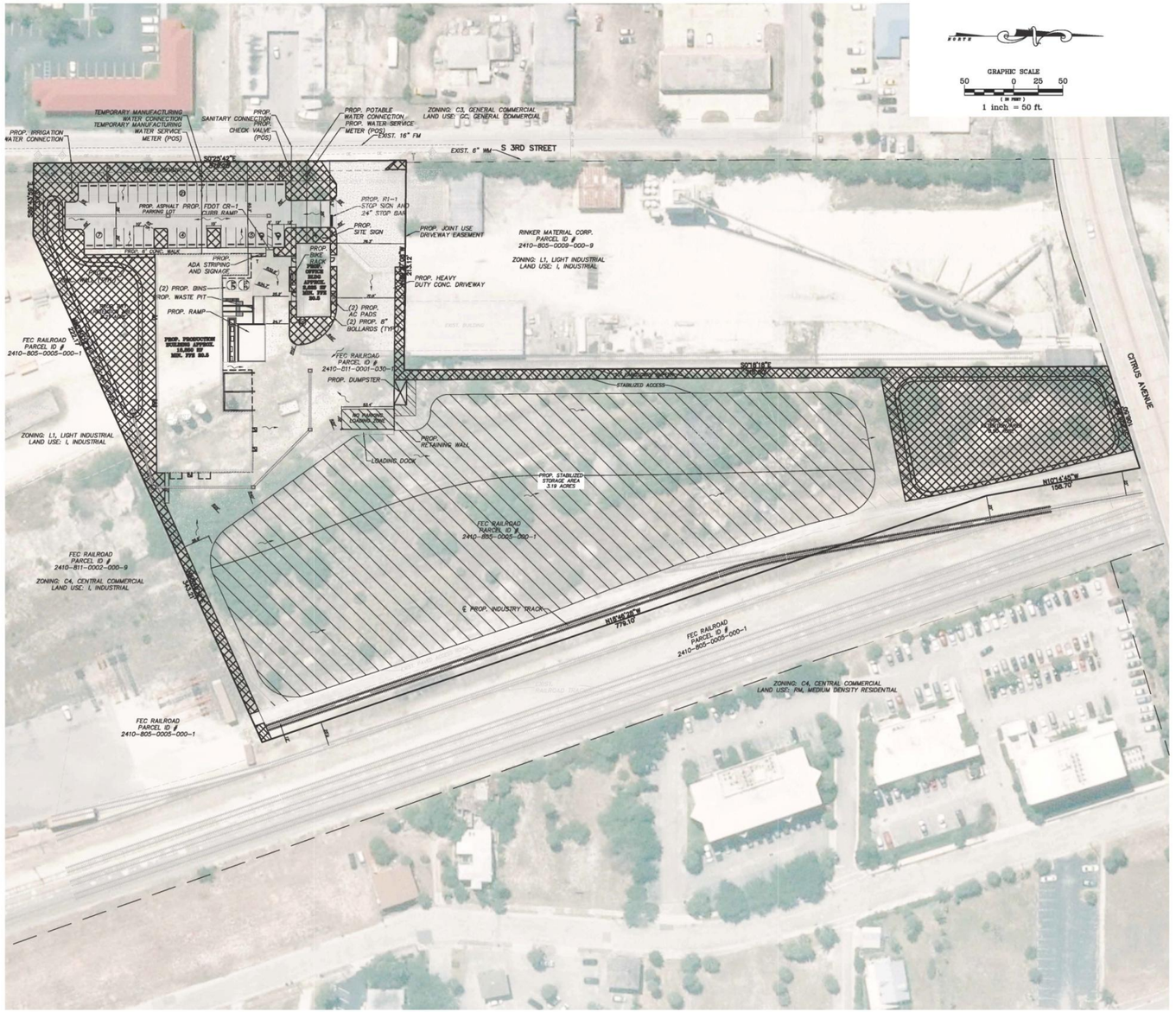

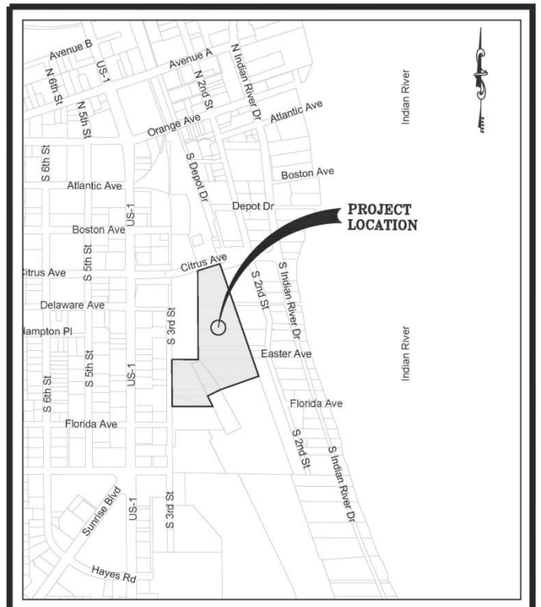

PROJECT LOCATION MAP
NTS

LEGEND
- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROPOSED STABILIZED ACCESS
- PROPOSED STORAGE AREA
- PROPOSED LANDSCAPE BUFFER
- PROPOSED OPEN SPACE (63,951 SF, 1.47 ACRES)
- PROPOSED ASPHALT
- OVERLAND FLOW DIRECTION
- PROPOSED WHEEL STOP
- EXIST. OVERHEAD UTILITIES
- EXIST. FENCE
- PROPERTY LINE
- CENTER LINE
- EXIST. RAILROAD TRACKS
- PROP. RAILROAD TRACKS
- PROP. 7' WALL

COMPUTER FILE REF.	FIELD BK./PG.
14-189 base.dwg	

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PHONE 772-220-3376 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA CERTIFICATION No. LB 636

– REVISIONS –	BY	DATE

	BY	DATE
FIELD		
CALCS.		
DRAWN	JK	12-15-14
DETAILED		
CHECKED		
APPROVED		

GENERAL LOCATION MAP, OPEN SPACE & SITE AERIAL EXHIBIT

ROCLA CROSSTIE FACILITY

DATE: 05-27-2015
HORIZ. SCALE: 1"=50'
VERT. SCALE: N\A
JOB No. 14-189
SHEET 1 OF 1

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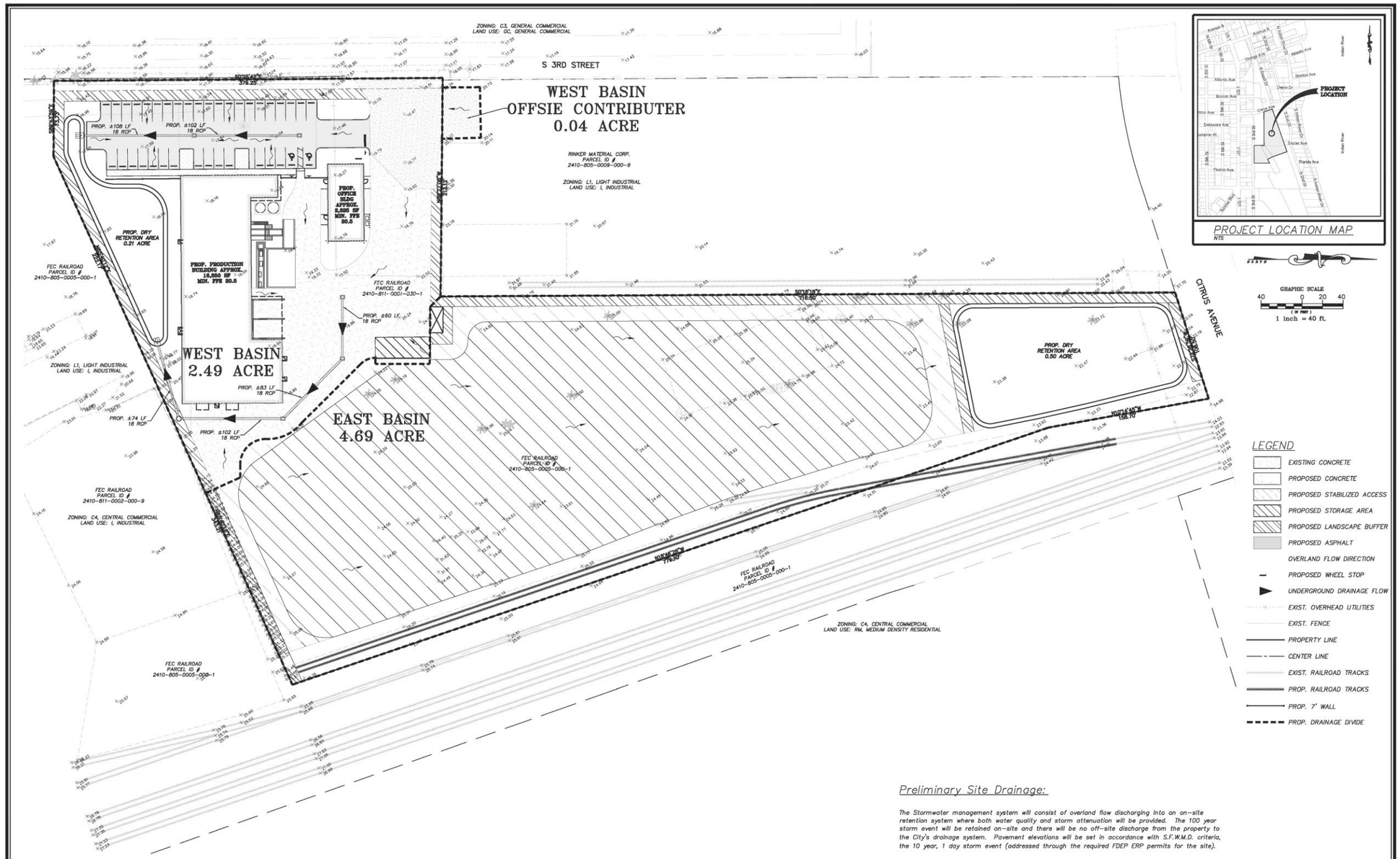

Preliminary Site Drainage:

The Stormwater management system will consist of overland flow discharging into an on-site retention system where both water quality and storm attenuation will be provided. The 100 year storm event will be retained on-site and there will be no off-site discharge from the property to the City's drainage system. Pavement elevations will be set in accordance with S.F.W.M.D. criteria, the 10 year, 1 day storm event (addressed through the required FDEP ERP permits for the site).

COMPUTER FILE REF.	FIELD BK./PG.
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151 SW FLAGLER AVENUE • STUART, FLORIDA 34994
PHONE 772-220-3376 • FAX 772-464-9497 • www.ct-engr.com
STATE OF FLORIDA CERTIFICATION No. EB 439

– REVISIONS –	BY	DATE

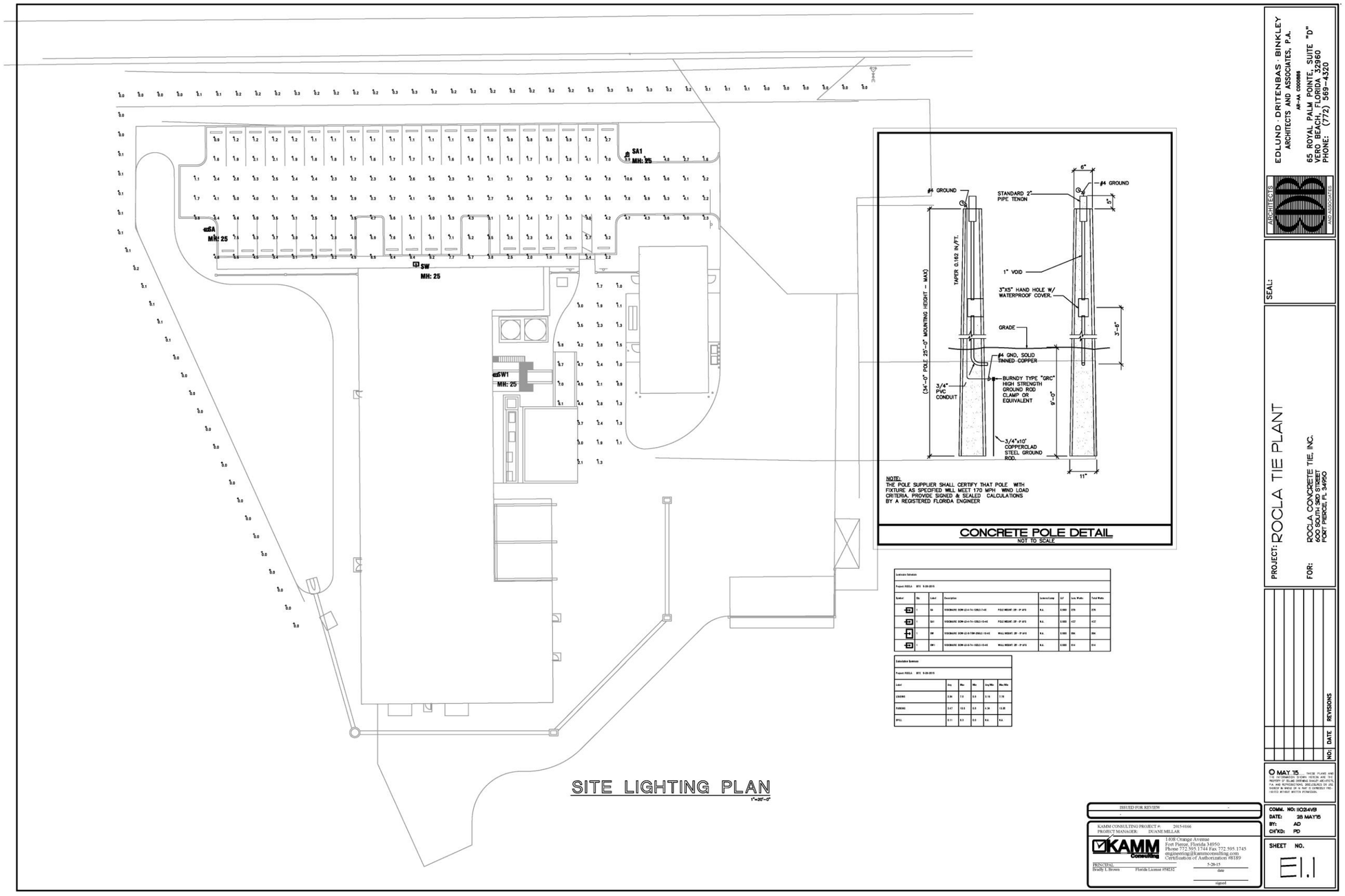
	BY	DATE
FIELD		
CALCS.		
DRAWN	JK	12-15-14
DETAILED		
CHECKED		
APPROVED		

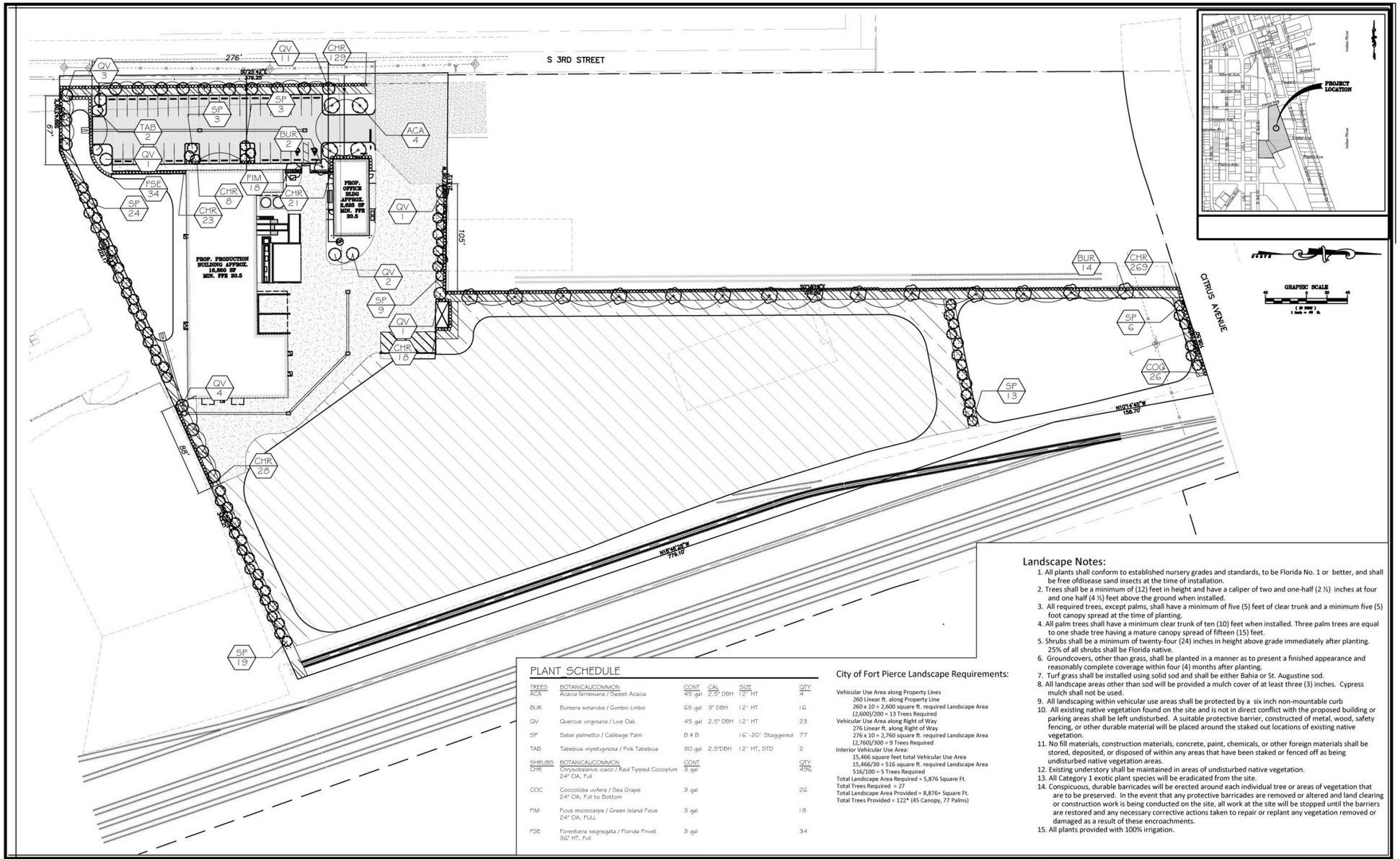
CONCEPTUAL DRAINAGE PLAN

ROCLA CROSSTIE FACILITY

DATE: 05-27-2015
HORIZ. SCALE: 1"=40'
VERT. SCALE: N\A
JOB No. 14-189
SHEET 1 OF 1

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission


SITE LIGHTING PLAN
1"=20'-0"
CONCRETE POLE DETAIL
NOT TO SCALE
NOTE:
THE POLE SUPPLIER SHALL CERTIFY THAT POLE WITH FIXTURE AS SPECIFIED WILL MEET 170 MPH WIND LOAD CRITERIA. PROVIDE SIGNED & SEALED CALCULATIONS BY A REGISTERED FLORIDA ENGINEER
#4 GROUND
STANDARD 2" PIPE TENON
1" VOID
3"X5" HAND HOLE W/ WATERPROOF COVER.
GRADE
#4 GND. SOLID TINNED COPPER
BURNDY TYPE "GRC" HIGH STRENGTH GROUND ROD CLAMP OR EQUIVALENT
3/4" PVC CONDUIT
3/4"x10' COPPERCLAD STEEL GROUND ROD.
TAPER 0.162 IN/FT.
(34'-0" POLE 25'-0" MOUNTING HEIGHT - MAX)
SA1 MH: 25
SA MH: 25
SW MH: 25
SW1 MH: 25
EDLUND · DRITENBAS · BINKLEY
ARCHITECTS AND ASSOCIATES, P.A.
65 ROYAL PALM POINTE, SUITE "D"
VERO BEACH, FLORIDA 32960
PHONE: (772) 569-4320
PROJECT: ROCLA TIE PLANT
FOR: ROCLA CONCRETE TIE, INC.
600 SOUTH 3RD STREET
FORT PIERCE, FL 34950
SEAL:
NO: DATE REVISIONS
MAY 15
COMM. NO: 11024VB
DATE: 28 MAY'15
BY: AD
CH'KD: PD
SHEET NO.
E1.1
ISSUED FOR REVIEW
KAMM CONSULTING PROJECT #: 2015-0466
PROJECT MANAGER: DUANE MILLAR
KAMM Consulting
1408 Orange Avenue
Fort Pierce, Florida 34950
Phone 772.595.1744 Fax 772.595.1745
engineering@kammconsulting.com
Certification of Authorization #8189
PRINCIPAL
Brady L Brown Florida License #58232
5-28-15
date
signed



PLANT SCHEDULE

TREES	BOTANICAL/COMMON	CONT	CAL	SIZE	QTY
ACA	Acacia farnesiana / Sweet Acacia	45 gal	2.5" DBH	12' HT	4
BUR	Bursera simaruba / Gumbo Limbo	65 gal	3" DBH	12' HT	16
QV	Quercus virginiana / Live Oak	45 gal	2.5" DBH	12' HT	23
SP	Sabal palmetto / Cabbage Palm	B & B		16'-20' Staggered	77
TAB	Tabebuia impetiginosa / Pink Tabebuia	30 gal	2.5"DBH	12' HT, STD	2
SHRUBS	**BOTANICAL/COMMON**	**CONT**			**QTY**
CHR	Chrysobalanus icaco / Red Tipped Cocoplum 24" OA, Full	3 gal			496
COC	Coccoloba uvifera / Sea Grape 24" OA, Full to Bottom	3 gal			26
FIM	Ficus microcarpa / Green Island Ficus 24" OA, FULL	3 gal			18
FSE	Forestiera segregata / Florida Privet 36" HT, Full	3 gal			34

City of Fort Pierce Landscape Requirements:

Vehicular Use Area along Property Lines
260 Linear ft. along Property Line
260 x 10 = 2,600 square ft. required Landscape Area
(2,600)/200 = 13 Trees Required
Vehicular Use Area along Right of Way
276 Linear ft. along Right of Way
276 x 10 = 2,760 square ft. required Landscape Area
(2,760)/300 = 9 Trees Required
Interior Vehicular Use Area:
15,466 square feet total Vehicular Use Area
15,466/30 = 516 square ft. required Landscape Area
516/100 = 5 Trees Required
Total Landscape Area Required = 5,876 Square Ft.
Total Trees Required = 27
Total Landscape Area Provided = 8,876+ Square Ft.
Total Trees Provided = 122* (45 Canopy, 77 Palms)

Landscape Notes:

1. All plants shall conform to established nursery grades and standards, to be Florida No. 1 or better, and shall be free ofdisease sand insects at the time of installation.
2. Trees shall be a minimum of (12) feet in height and have a caliper of two and one-half (2 ½) inches at four and one half (4 ½) feet above the ground when installed.
3. All required trees, except palms, shall have a minimum of five (5) feet of clear trunk and a minimum five (5) foot canopy spread at the time of planting.
4. All palm trees shall have a minimum clear trunk of ten (10) feet when installed. Three palm trees are equal to one shade tree having a mature canopy spread of fifteen (15) feet.
5. Shrubs shall be a minimum of twenty-four (24) inches in height above grade immediately after planting. 25% of all shrubs shall be Florida native.
6. Groundcovers, other than grass, shall be planted in a manner as to present a finished appearance and reasonably complete coverage within four (4) months after planting.
7. Turf grass shall be installed using solid sod and shall be either Bahia or St. Augustine sod.
8. All landscape areas other than sod will be provided a mulch cover of at least three (3) inches. Cypress mulch shall not be used.
9. All landscaping within vehicular use areas shall be protected by a six inch non-mountable curb
10. All existing native vegetation found on the site and is not in direct conflict with the proposed building or parking areas shall be left undisturbed. A suitable protective barrier, constructed of metal, wood, safety fencing, or other durable material will be placed around the staked out locations of existing native vegetation.
11. No fill materials, construction materials, concrete, paint, chemicals, or other foreign materials shall be stored, deposited, or disposed of within any areas that have been staked or fenced off as being undisturbed native vegetation areas.
12. Existing understory shall be maintained in areas of undisturbed native vegetation.
13. All Category 1 exotic plant species will be eradicated from the site.
14. Conspicuous, durable barricades will be erected around each individual tree or areas of vegetation that are to be preserved. In the event that any protective barricades are removed or altered and land clearing or construction work is being conducted on the site, all work at the site will be stopped until the barriers are restored and any necessary corrective actions taken to repair or replant any vegetation removed or damaged as a result of these encroachments.
15. All plants provided with 100% irrigation.

COMPUTER FILE REF.	FIELD BK./PG.

BOGGS
PLANNING + LANDSCAPE ARCHITECTURE
100 AVENUE A SUITE 2E
FORT PIERCE, FLORIDA 34950

– REVISIONS –	BY	DATE
REVISED PER STAFF COMMENTS	DMH	5-29-15

	BY	DATE
DRAWN	DMH	5-5-14
CHECKED	GB	5-7-14
APPROVED		

ROCLA CONCRETE TIE, INC

PRELIMINARY LANDSCAPE PLAN

DATE: 05-05-14
HORIZ. SCALE: 1"=40'
JOB No.
SHEET 1 OF 2

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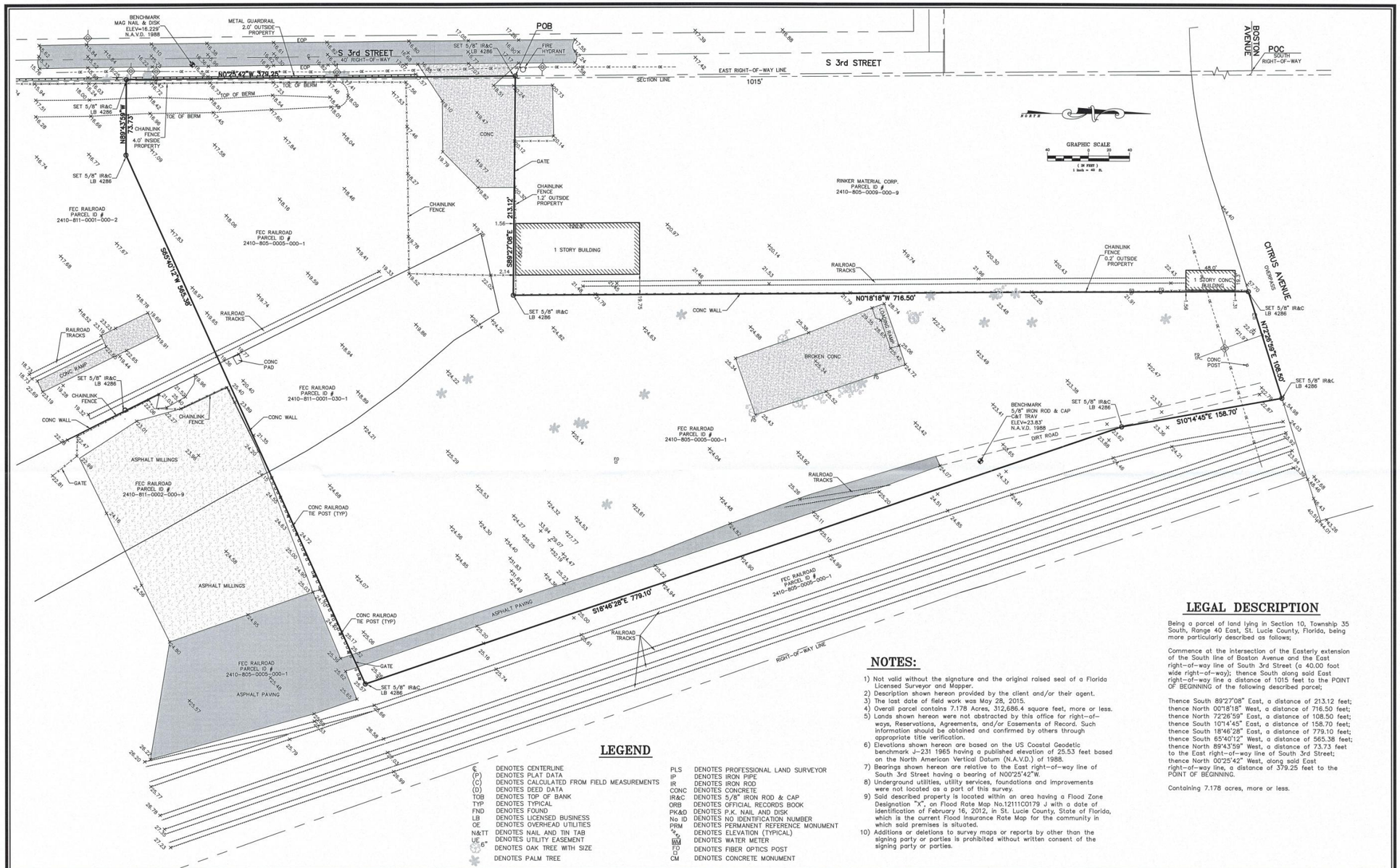

LEGAL DESCRIPTION

Being a parcel of land lying in Section 10, Township 35 South, Range 40 East, St. Lucie County, Florida, being more particularly described as follows;

Commence at the intersection of the Easterly extension of the South line of Boston Avenue and the East right-of-way line of South 3rd Street (a 40.00 foot wide right-of-way); thence South along said East right-of-way line a distance of 1015 feet to the POINT OF BEGINNING of the following described parcel;

Thence South 89°27'08" East, a distance of 213.12 feet; thence North 00°18'18" West, a distance of 716.50 feet; thence North 72°26'59" East, a distance of 108.50 feet; thence South 10°14'45" East, a distance of 158.70 feet; thence South 18°46'28" East, a distance of 779.10 feet; thence South 65°40'12" West, a distance of 565.38 feet; thence North 89°43'59" West, a distance of 73.73 feet to the East right-of-way line of South 3rd Street; thence North 00°25'42" West, along said East right-of-way line, a distance of 379.25 feet to the POINT OF BEGINNING.

Containing 7.178 acres, more or less.

NOTES:

1) Not valid without the signature and the original raised seal of a Florida Licensed Surveyor and Mapper.
2) Description shown hereon provided by the client and/or their agent.
3) The last date of field work was May 28, 2015.
4) Overall parcel contains 7.178 Acres, 312,686.4 square feet, more or less.
5) Lands shown hereon were not abstracted by this office for right-of-ways, Reservations, Agreements, and/or Easements of Record. Such information should be obtained and confirmed by others through appropriate title verification.
6) Elevations shown hereon are based on the US Coastal Geodetic benchmark J-231 1965 having a published elevation of 25.53 feet based on the North American Vertical Datum (N.A.V.D.) of 1988.
7) Bearings shown hereon are relative to the East right-of-way line of South 3rd Street having a bearing of N00°25'42"W.
8) Underground utilities, utility services, foundations and improvements were not located as a part of this survey.
9) Said described property is located within an area having a Flood Zone Designation "X", on Flood Rate Map No.12111C0179 J with a date of identification of February 16, 2012, in St. Lucie County, State of Florida, which is the current Flood Insurance Rate Map for the community in which said premises is situated.
10) Additions or deletions to survey maps or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.

LEGEND

℄	DENOTES CENTERLINE	PLS	DENOTES PROFESSIONAL LAND SURVEYOR
(P)	DENOTES PLAT DATA	IP	DENOTES IRON PIPE
(C)	DENOTES CALCULATED FROM FIELD MEASUREMENTS	IR	DENOTES IRON ROD
(D)	DENOTES DEED DATA	CONC	DENOTES CONCRETE
TOB	DENOTES TOP OF BANK	IR&C	DENOTES 5/8" IRON ROD & CAP
TYP	DENOTES TYPICAL	ORB	DENOTES OFFICIAL RECORDS BOOK
FND	DENOTES FOUND	PK&D	DENOTES P.K. NAIL AND DISK
LB	DENOTES LICENSED BUSINESS	No ID	DENOTES NO IDENTIFICATION NUMBER
OE	DENOTES OVERHEAD UTILITIES	PRM	DENOTES PERMANENT REFERENCE MONUMENT
N&TT	DENOTES NAIL AND TIN TAB	45.45	DENOTES ELEVATION (TYPICAL)
UE	DENOTES UTILITY EASEMENT	WM	DENOTES WATER METER
6"	DENOTES OAK TREE WITH SIZE	FO	DENOTES FIBER OPTICS POST
	DENOTES PALM TREE	CM	DENOTES CONCRETE MONUMENT

THOMAS P. KIERNAN
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATE NO. 6199

5/28/15
SIGNATURE DATE

COMPUTER FILE REF.	FIELD BK./PG.
14-189map2.dwg	

CULPEPPER & TERPENING, INC
CONSULTING ENGINEERS | LAND SURVEYORS
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
131 SW FLAGLER AVENUE • STUART, FLORIDA 34994
PHONE 772-220-3376 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA CERTIFICATION No. LB 4286

– REVISIONS –	BY	DATE
CHANGED AREA OF SURVEY, REVISED LEGAL DESCRIPTION	GLM	5-28-15
CHANGED AREA OF SURVEY, REVISED LEGAL DESCRIPTION	GLM	3-26-15

	BY	DATE
FIELD		
CALCS.		
DRAWN	GLM	12-10-14
DETAILED		
CHECKED		
APPROVED		

BOUNDARY, TOPOGRAPHIC & TREE SURVEY
PREPARED FOR
ROCLA CONCRETE TIE, INC.

DATE: 12-10-2014
HORIZ. SCALE: 1"=40'
VERT. SCALE: N\A
JOB No. 14-189
SHEET 1 OF 1

P:\Proj 2014\14-189 Rocla Crosstie, SM\Survey\14-189 map2.dwg, 5/28/2015 9:42:28 AM

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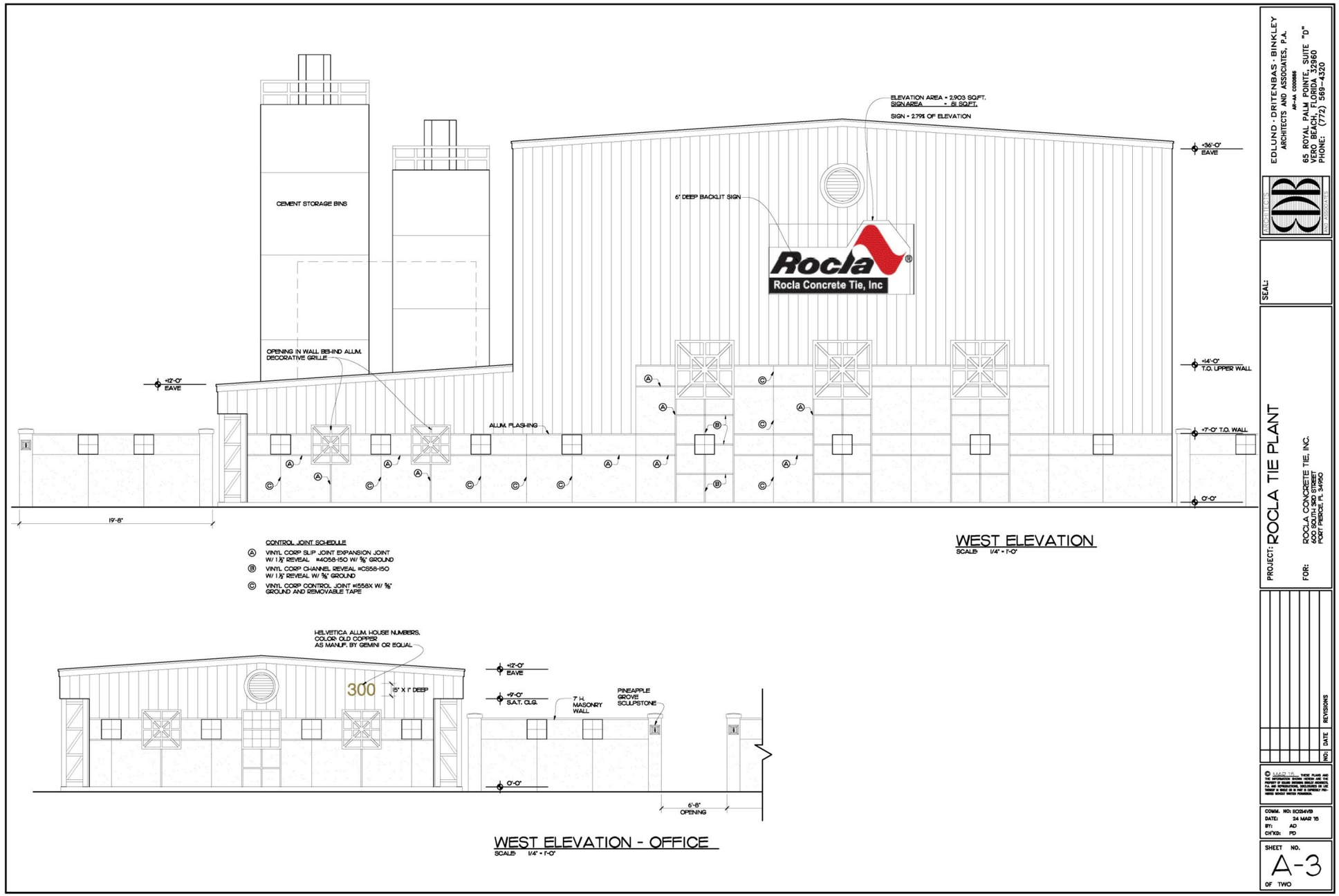

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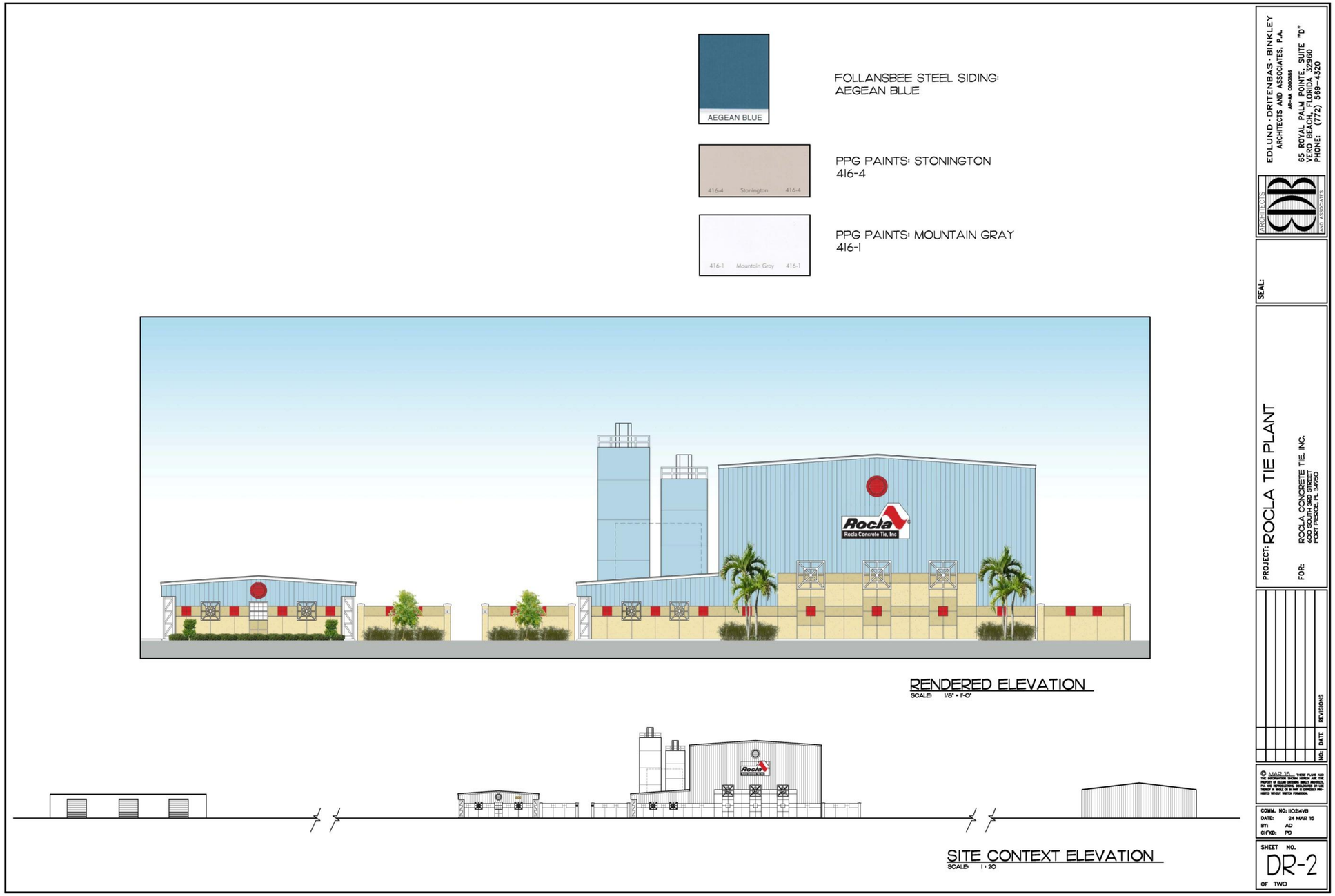
AEGEAN BLUE
FOLLANSBEE STEEL SIDING:
AEGEAN BLUE
416-4 Stonington 416-4
PPG PAINTS: STONINGTON
416-4
416-1 Mountain Gray 416-1
PPG PAINTS: MOUNTAIN GRAY
416-1
Rocla
Rocla Concrete Tie, Inc.
RENDERED ELEVATION
SCALE: 1/8" = 1'-0"
SITE CONTEXT ELEVATION
SCALE: 1:20
EDLUND · DRITENBAS · BINKLEY
ARCHITECTS AND ASSOCIATES, P.A.
AR-AA C000886
65 ROYAL PALM POINTE, SUITE "D"
VERO BEACH, FLORIDA 32960
PHONE: (772) 569-4320
ARCHITECTS AND ASSOCIATES
SEAL:
PROJECT: ROCLA TIE PLANT
FOR: ROCLA CONCRETE TIE, INC.
600 SOUTH 3RD STREET
FORT PIERCE, FL 34950
NO. DATE REVISIONS
© MAR 15 THESE PLANS AND THE INFORMATION SHOWN HEREON ARE THE PROPERTY OF EDLUND DRITENBAS BINKLEY ARCHITECTS, P.A. AND REPRODUCTIONS, DISCLOSURES OR USE THEREOF IN WHOLE OR IN PART IS EXPRESSLY PROHIBITED WITHOUT WRITTEN PERMISSION.
COMM. NO: 11021-4VB
DATE: 24 MAR '15
BY: AD
CH'KD: PD
SHEET NO.
DR-2
OF TWO

SECTION VI

PETITION FOR CHANGE IN ZONING TO PLANNED DEVELOPMENT ZONING DISTRICT

ENVIRONMENTAL ASSESSMENT

[go to next page]

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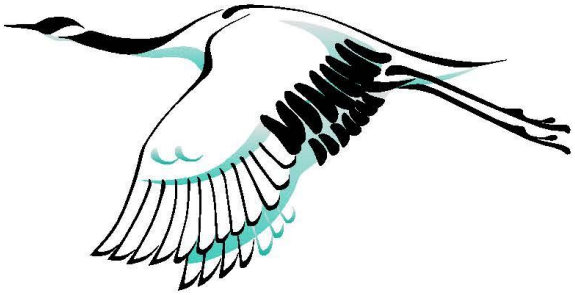
ROCLA CONCRETE TIES, INC.
SOUTH 3RD STREET

CITY OF FORT PIERCE, FLORIDA

Environmental Assessment
April 2015



Prepared for:
Mr. Rusty Croley, Vice President
Rocla Concrete Ties, Inc.
1819 Denver West Drive, Suite 450
Lakewood, CO. 80401
c/o Stefan K. Matthes, P.E.
Culpepper & Terpening, Inc.
Fort Pierce, FL.
(772) 464-3537

Prepared by:
Hobe Sound Environmental Consultants, Inc.
9512 SE Bridge Road
Hobe Sound, FL 33455
(772) 545-3676, Cell: (772) 260-0857
E-mail: bobhsenv@gmail.com

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NOTE: This Report, together with the concepts and design presented herein, as an instrument of service, is intended only for the specific purpose and Client for which it was prepared. Reuse of and improper reliance on this Report without written authorization and adaptation by Hobe Sound Environmental Consultants, Inc. shall be without liability to Hobe Sound Environmental Consultants, Inc.

ENVIRONMENTAL ASSESSMENT REPORT
ROCLA CONCRETE TIES, INC.

1.00 INTRODUCTION

The following Environmental Assessment Report of the Rocla Concrete Ties, Inc. project site has been prepared by Hobe Sound Environmental Consultants, Inc. (HSE). The project site consists of approximately 7.547 acres of land located south of Citrus Avenue, east of South 3rd Street, north of Florida Avenue and west of the Florida East Coast Railway tracks (Figures 1, 2 and 3 of 13). The project site is located at Latitude 27°26'30.923" and Longitude -80°19'25.462" in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

The purpose of this report is to provide the methodologies and findings of a scientific environmental assessment of the project site. This report addresses the following environmental issues: protected species, wildlife, vegetative communities, wetlands, soils, and topography. The report is based on field data collected on date(s).

2.00 AGENCY CONTACTS

HSE contacted, and is coordinating with, the following state and federal agencies: U.S. Fish and Wildlife Service (FWS), Florida Fish and Wildlife Conservation Commission (FFWCC), Florida Natural Areas Inventory (FNAI), and the State Historic Preservation Officer (SHPO) (Appendix A). An eagle locator map and National Wetlands Inventory (NWI) Map can be found as Figures 4 and 5 of 13.

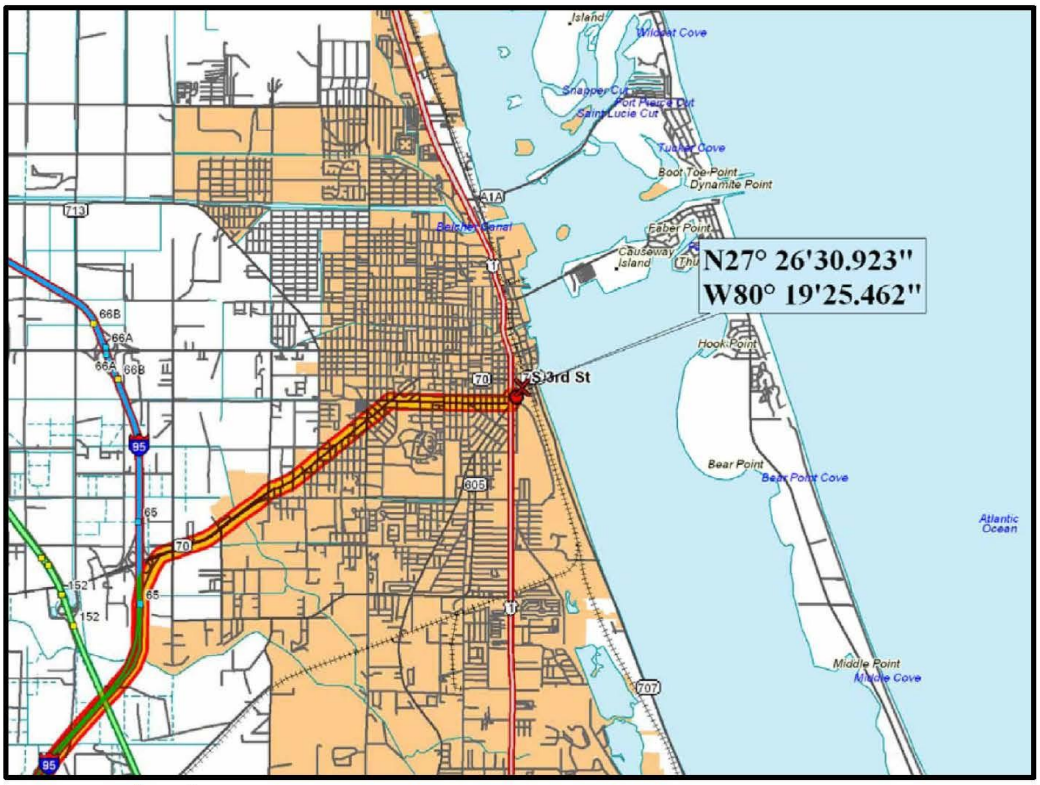
THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

NOT A SURVEY

NORTH

0' 4000' 8000' 16000' 32000'

SCALE: 1" = 8000'



DIRECTIONS:

		Dist	Turn		Road	Near	Exit	Time	Total Dist
					I-95 S				
	in	0.00 mi	Start(N)		I-95 N			0:00:00	0.00 mi
	in	0.10 mi	Bear right(NNE)	on to	Okeechobee Rd Ramp			0:00:07	0.10 mi
	in	0.55 mi	Bear right(ENE)	on to	Okeechobee Rd			0:01:26	0.65 mi
	in	1.30 mi	Bear right(NE)	on to	SR 70 (Okeechobee Rd)			0:04:58	1.94 mi
	in	1.59 mi	Bear right(E)	on to	Georgia Ave			0:08:46	3.53 mi
	in	1.24 mi	Turn left(N)	on to	US 1 (S US 1|SR 5|S Federal Hwy|S 4...			0:10:53	4.77 mi
	in	0.07 mi	Turn right(E)	on to	Florida Ave			0:11:03	4.84 mi
	in	0.08 mi	Finish	at	Florida Ave			0:11:22	4.92 mi

Total Time: 0:11:22 Total Distance: 4.92 mi

SOURCE: DELORME STREET ATLAS USA,DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	01 - VICINITY MAP	1 APRIL 2015	1 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP		CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
VICINITY MAP

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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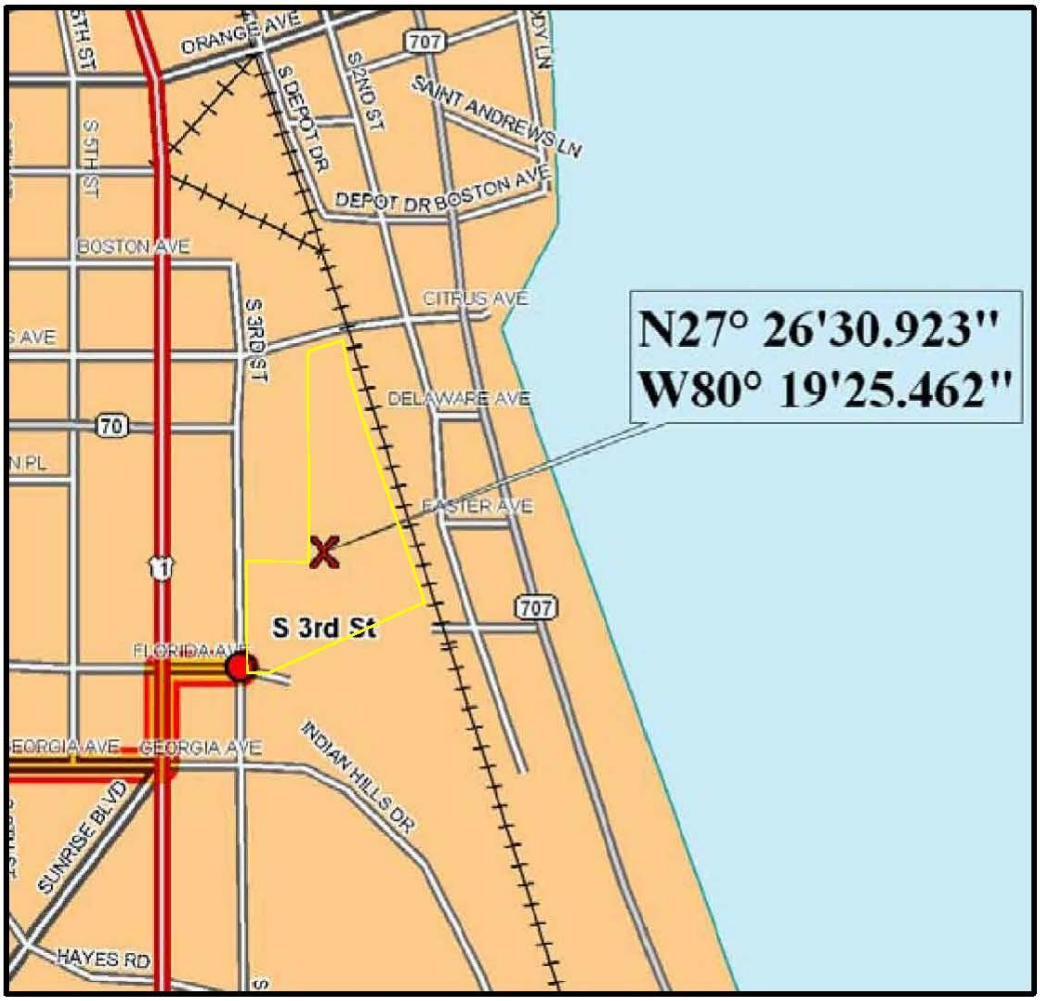
NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
LOCATION MAP

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



SOURCE:ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
2014 AERIAL PHOTOGRAPH

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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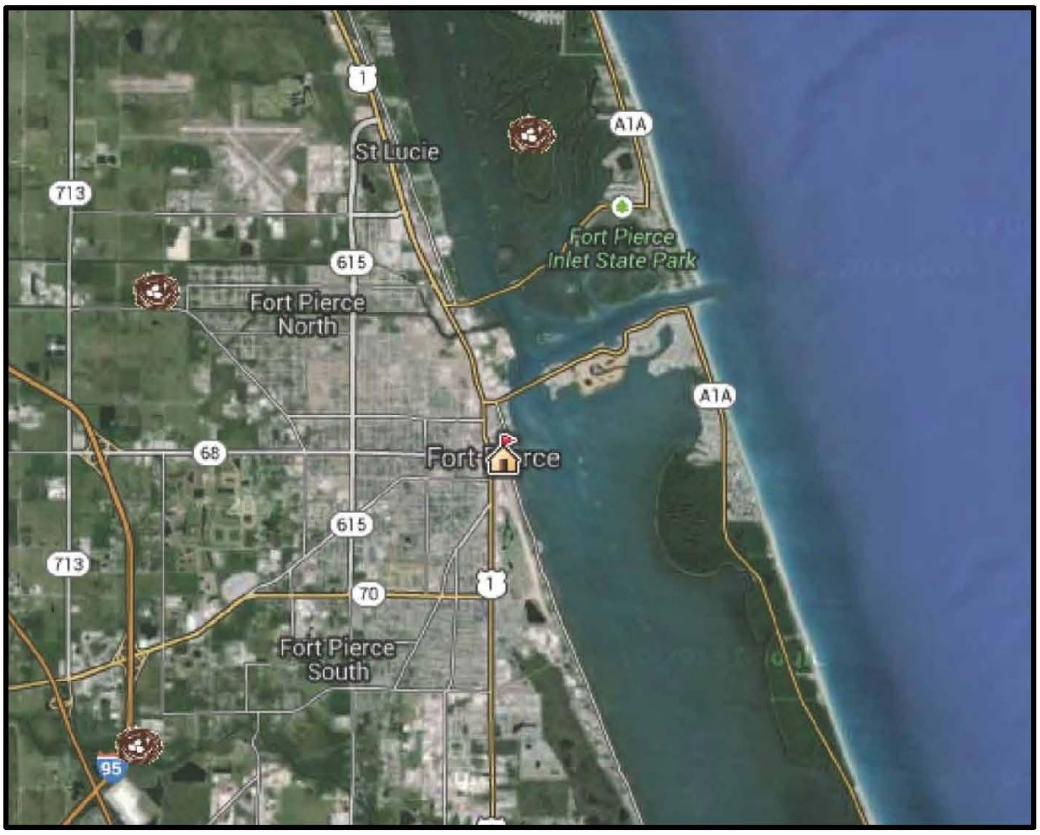
NOT A SURVEY

SCALE: 1" = N.T.S.

NORTH



BALD EAGLE NEST DATA SEARCH (5 MILE RADIUS) RESULTS

	Nest ID	County	Latitude	Longitude	Known Active	Last Survey	Distance
View History	SL006	St. Lucie	27 23.92	80 23.20	2012	2012	4.88
View History	SL011	St. Lucie	27 28.10	80 23.01	2012	2012	4.09
View History	SL014	St. Lucie	27 29.55	80 19.11	2012	2012	3.51

SOURCE:https://public.myfwc.com/FWRI/EagleNests/nestlocator.aspx

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	04 - EAGLE NEST.DWG	1 APRIL 2015	4 OF 13
LATITUDE: 27°26'30.923"				LONGITUDE: -80°19'25.462"	DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
BALD EAGLE (Haliaeetus leucocephalus) LOCATIONS

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NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands
- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

SOURCE: http://www.fws.gov/wetlands/Data/Mapper.html

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	05 NWI .DWG	1 APRIL 2015	5 OF 13
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
NATIONAL WETLANDS INVENTORY MAP

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3.00 METHODOLOGY

3.01 Gopher Tortoise and Other Burrow Commensals

3.01.1 Objective

Conduct a systematic survey to locate gopher tortoises (*Gopherus polyphemus*), Florida mouse (*Podomys floridanus*), eastern indigo snake (*Drymarchon corais couperi*), and Florida gopher frogs (*Rana areolata*) that may be present within the study area.

3.01.2 Methodology

Biologists followed the survey protocol as recommended in Ecology and Habitat Protection Needs of Gopher Tortoise (*Gopherus polyphemus*) Populations Found on Lands Slated for Large-scale Development in Florida; Non-game Wildlife Program, Technical Report #5, Florida Game and Fresh Water Fish Commission (FGFWFC), now known as FFWCC, Tallahassee, Florida, December 1987, and the Gopher Tortoise Permitting Guidelines, FFWCC, Tallahassee, Florida April 2008, revised February 2015.

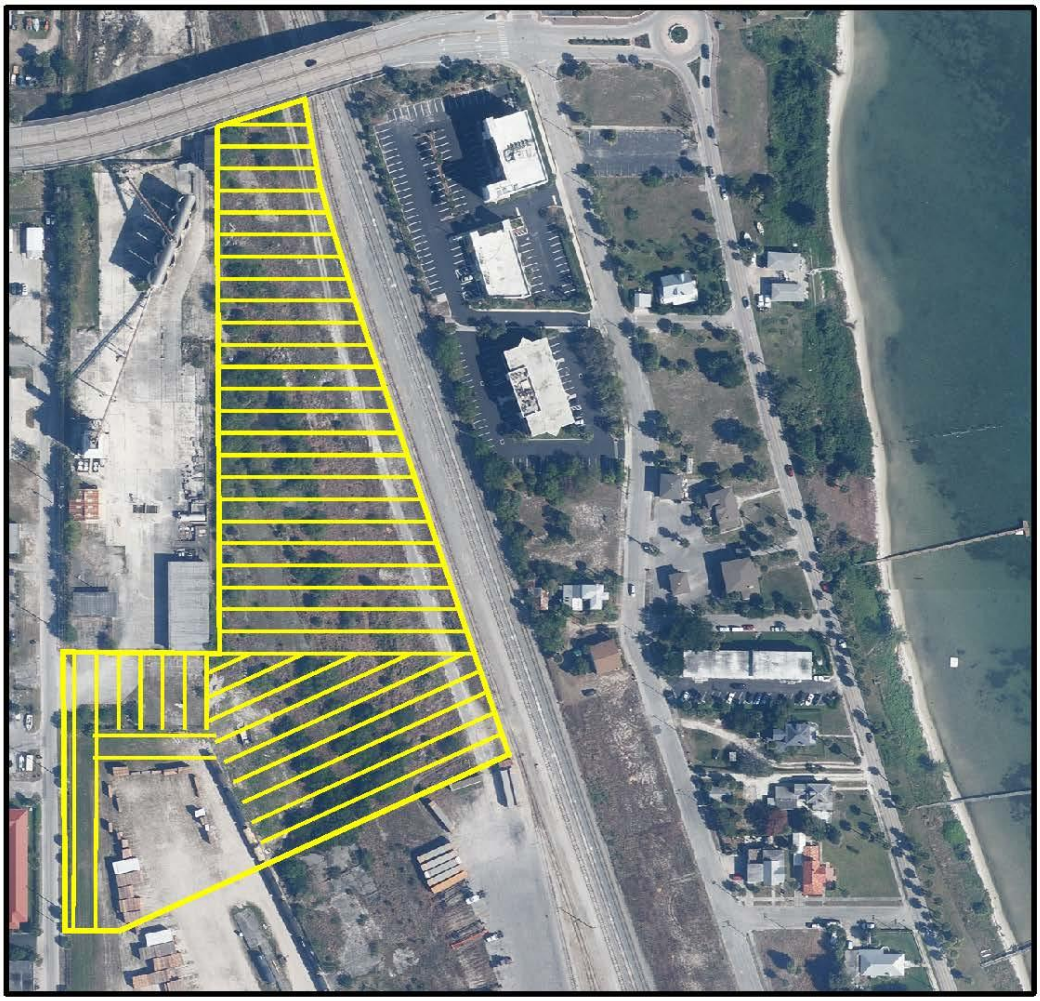
- Biologists conducted parallel transects 10 meters (±32 feet) apart (Figure 6 of 13).
- Biologists conducted serpentine search patterns between the parallel transects.
- All gopher tortoise burrows located were flagged as either potentially occupied or abandoned.
- All gopher tortoise burrows located were assigned an identification number and recorded.

NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



SOURCE:2014 AERIAL PHOTOGRAPH ST. LUCIE COUNTY, FLORIDA AND HSE

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 06 - PED TRAN.DWG	DATE: 1 APRIL 2015	FIGURE: 6 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
PEDESTRAIN TRANSECT LOCATIONS

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- Biologists mapped all gopher tortoise burrows on a recent aerial photograph

- Additional data and notes were collected by biologists to determine potential or documented occurrences of the eastern indigo snake, Florida gopher frog, and Florida mouse.

3.02 Protected Species/Wildlife Survey

3.02.1 Objective

Conduct a systematic survey for flora and fauna that may occur on-site and note the presence of any protected species listed in *Florida's Endangered and Threatened Species,* Updated January 2013, FFWCC.

The state lists of animals are maintained by the FFWCC and categorized as endangered, threatened and species of special concern, in accordance with Rules 68A-27.003 (Endangered and Threatened) and 68A-27.005 (Species of Special Concern), Florida Administrative Code (F.A.C.). The state lists of plants are categorized into endangered, threatened, and commercially exploited, and are maintained by the Florida Department of Agriculture and Consumer Services (DOACS) via Chapter 5B-40, F.A.C. The state plant lists are statutorily designated via the Preservation of Native Flora of Florida Act (Title XXXV, Chapter 581,581.185-187. Florida Statutes).

The federal agencies that share the authority to list species as Endangered and Threatened are the National Oceanic and Atmospheric Administration-National Marine Fisheries Service (NOAA-NMFS) and the U.S. Fish and Wildlife Service (USFWS). The NOAA-NMFS is responsible for listing most marine species. The federal list of animals and plants is administered by the USFWS, and is published in 50 CFR 17.11 (wildlife) and 50 CFR17.12 (plants). Thge lists are categorized into

endangered species (E), threatened species (T), or endangered or threatened for similarity of appearance (E of T (S/A).

3.02.2 Methodology

Following are the methodologies biologists used to conduct the wildlife/protected species surveys.

3.02.2.1 ***Pedestrian Transects***

- Biologists conducted pedestrian transects throughout the project site on 31 March 2015 (Figure 6 of 13).
- The transects meandered through areas of suitable habitat.
- Biologists recorded and noted sightings, tracks, scat, tree markings, nests, cavities, and burrows.

3.03 Vegetation Survey (FLUCFCS)

3.03.1 Objective

To map vegetation on-site according to the *Florida Land Use, Cover and Forms Classification System* (FLUCFCS).

3.03.2 Methodology

Biologists used the following methodology to map vegetation found on the project site.

- Biologists used the *Florida Land Use, Cover and Forms Classification System* (FLUCFCS), September 1985, State of Florida Department of Transportation, State Topographic Bureau, Thematic Mapping Section.

- Biologists based vegetative community descriptions on field surveys, United States Department of Agriculture (USDA) Soil Conservation Service (SCS) soil maps, and aerial photograph interpretations.

- Numerical community designations were carried to Levels II or III, as determined to be appropriate, according to FLUCFCS.

3.04 Jurisdictional Wetlands

3.04.1 Objective

To identify and locate State of Florida (SFWMD) and Federal (COE) jurisdictional wetlands that may occur on the project site.

3.04.2 Methodology

Biologists used the following methodologies to locate State of Florida and Federal jurisdictional wetlands on-site.

- Biologists delineated wetlands according to Florida Administrative Code (FAC) 62-340.

- Biologists delineated wetlands according to the COE Wetland Delineation Manual, January 1987, Technical Report Y-87-1.

- Biologists flagged the wetlands with consecutively numbered flagging tape marked "Wetland Delineation".

- Biologists completed COE wetland delineation data sheets.

3.05 Soils

3.05.1 Objective

To identify project soil types according to the SCS.

3.05.2 Methodology

Biologists used the following methodology to identify soil types found on the project site.

- Project soils were mapped according to the *Soil Survey of St. Lucie County, Florida*, March 1980, United States Department of Agriculture, Soil Conservation Service (SCS).

3.06 Topography

3.06.1 Objective

To identify the topography of the project site.

3.06.2 Methodology

Biologists used the *U.S. Geological Survey (USGS) Topographic Map, Ankona Quadrangle, Florida 7.5 Minute Series* to determine site topography.

4.00 RESULTS

4.01 Gopher Tortoise and Other Burrow Commensals

One (1) potentially occupied gopher tortoise burrow was located by biologists during the gopher tortoise and commensal species survey (Figure 7 of 13). Biologists recorded the approximate GPS coordinates of the gopher tortoise burrow using a hand-held GPS unit. The gopher tortoise population for the project site was estimated using the following FFWCC formula:

Est. # gopher tortoises = # potentially occupied burrows x 0.50

The 0.50 factor in the equation is based on data collected and evaluated by the FFWCC, and is specific for the South Florida area. The estimated gopher tortoise population for the project site is one (1). Gopher tortoises are listed by the state as threatened and may also be listed by the USFWS in the near future as threatened.

Commensal species such as the eastern indigo snake and Florida gopher frog were not observed by biologists, however, they may occur on-site since suitable habitat exists on-site for these species. The Florida mouse was not observed on-site and no suitable habitat for this species exists on-site. The gopher frog is designated as a species of special concern (SSC) by the State of Florida. The eastern indigo snake is designated as threatened (T) by the State of Florida and the U.S. Fish and Wildlife Service. These species are protected under regulations set forth in the Wildlife Code of the State of Florida, Chapter 39 FAC, Rule 39-4.001 and 39-25.002, as well as Chapter 39-27.

Prior to site development, the Applicant must prepare an Eastern Indigo Snake Protection Plan and coordinate same with staff members of the FWS and FFWCC. The Eastern Indigo Snake Determination Key has been utilized in Section 4.02.1.1 below.

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'





ADULT MALE GOPHER TORTOISE (Gopherus polyphemus)

I HEREBY CERTIFY THAT:

A 100% SURVEY FOR GOPHER TORTOISES WAS CONDUCTED ON 31 MARCH 2015, ACCORDING TO FWC GUIDELINES. ONE (1) POTENTIALLY OCCUPIED GOPHER TORTOISE BURROW WAS LOCATED DURING THE SURVEY. THE ESTIMATED GOPHER TORTOISE POPULATION IS ONE (1).

ROBERT L. WEIGT, GTA-09-00153B

SOURCE:ST. LUCIE COUNTY 2014 AERIAL PHOTOGRAPH

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	07 - GT BURROW MAP.DWG	01 APRIL 2015	7 OF 13
LATITUDE: 27°26'30.923"				LONGITUDE: -80°19'25.462"	DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
GOPHER TORTOISE BURROW SURVEY

Hobe Sound Environmental Consultants Inc.
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

Per FFWCC guidelines, construction activities must not occur within a 25-foot radius of the mouth of a potentially occupied gopher tortoise burrow. If impacts are unavoidable, then the tortoises must be relocated to either an on-site or off-site preserve area. Relocation can be accomplished through the issuance of a FFWCC 10 or fewer burrows permit. Under this type of permit, tortoises can be relocated on-site, or off-site to a FFWCC approved gopher tortoise mitigation bank. A mitigation contribution paid directly to FFWCC is applicable a the rate outlined in the table below. Mitigation Bank fees range from $850.00 to over $1,000.00 per tortoise. Additional fees include preparation of the relocation permit on-ste meeting with FFWCC (if necessary), burrow excavation, preparation and transportation and after action report.

PERMIT TYPE	PERMIT DURATION	MITIGATION CONTRIBUTION
10 or fewer burrows *Tortoises are relocated on-site or off-site**	1 year	$203

* Gopher tortoises relocated off-site under a 10 or fewer burrows permit cannot be relocated to an unprotected recipient site.

4.02 Protected Species/Wildlife Survey

4.02.1 Protected Fauna

Various mammals, reptiles, and birds were observed on-site during the pedestrian transects. Wildlife species observed on-site during the pedestrian transects survey are listed in Table 1. The only protected species observed on-site was the gopher tortoise. Protected Species that potentially occur in St. Lucie County and may occur within the project site are listed in Table 2. Because there is potential habitat for the eastern indigo snake, the determination key has been utilized below

Although the site is within the core foraging area of one (1) wood stork colony (Figure 8 of 13), no wood storks were located on-site and there is no habitat

Table 1. Wildlife Observed on the Rocla Concrete Ties, Inc. Project Site During the Protected Species Survey.

A. Birds

Common Name	Scientific Name	Protected Species	
		State	Federal
Northern mockingbird	*Mimus polyglottos*	---	---

B. Mammals

Common Name	Scientific Name	Protected Species	
		State	Federal
Eastern cottontail rabbit	*Sylvilagus floridanus*	---	---
Nine-banded armadillo	*Dasypus novemcinctus*	---	---
Hispid cotton rat	*Sigmodon hispidus*	---	---

C. Reptiles

Common Name	Scientific Name	Protected Species	
		State	Federal
Brown anole	*Anolis sagrei*	---	---
Black racer	*Coluber constrictor constrictor*	---	---
Gopher tortoise	*Gopherus polyphemus*	SSC	---

Table 2. Rocla Concrete Ties, Inc. Project Site: Federal/State Listed Fauna and Flora Potentially Found in St. Lucie County, Florida.

A. Amphibians

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Gopher frog	*Rana areolata aesopus*	N	SSC	Yes	likely	not observed during preliminary pedestrian transects

B. Fish

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Mangrove rivulus	*Rivulus marmoratus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects

C. Reptiles

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
American alligator	*Alligator mississipiensis*	T(S/A)	SSC	No	not likely	not observed during preliminary pedestrian transects
Green turtle	*Chelonia myda*	E	E	No	not likely	not observed during preliminary pedestrian transects
Leatherback turtle	*Dermochelys coriacea*	E	E	No	not likely	not observed during preliminary pedestrian transects
Eastern indigo snake	*Drymarchon corais couperi*	T	T	Yes	likely	not observed during preliminary pedestrian transects
Hawksbill	*Eretmochelys imbricata*	E	E	No	not likely	not observed during preliminary pedestrian transects
Gopher tortoise	*Gopherus polyphemus*	N	SSC	Yes	observed	One (1) active gopher tortoise burrow located during preliminary pedestrian transects
Kemp's ridley	*Lepidochelys kempii*	E	E	No	not likely	not observed during preliminary pedestrian transects
Florida pine snake	*Pituophis melanoleucus mugitus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Loggerhead	*Caretta caretta*	T	T	No	not likely	not observed during preliminary pedestrian transects

Table 2: Continued.

D. Birds

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Florida scrub jay	*Aphelocoma coerulescens coerulescens*	T	T	No	not likely	not observed during preliminary pedestrian transects
Little blue heron	*Egretta caerulea*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Snowy egret	*Egretta thula*	T	SSC	No	not likely	not observed during preliminary pedestrian transects
Tri-colored heron	*Egretta tricolor*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
White ibis	*Eudocimus albus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Peregrine falcon	*Falco peregrinus*	E (S/A)	E	No	not likely	not observed during preliminary pedestrian transects
Bald eagle	*Haliaeetus leucocephalus*	T	T	No	not likely	not observed during preliminary pedestrian transects
Wood stork	*Mycteria americana*	E	E	No	not likely	not observed during preliminary pedestrian transect
Osprey	*Pandion haliaetus*	N	SSC*	No	not likely	not observed during preliminary pedestrian transects
Brown pelican	*Pelecanus occidentalis*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Snail kite	*Rostrhamus sociabilis plumbeus*	E	E	No	not likely	not observed during preliminary pedestrian transects
Black skimmer	*Rynchops niger*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Florida burrowing owl	*Speotyto cunicularia foridana*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Least tern	*Sterna antillarum*	N	T	No	not likely	not observed during preliminary pedestrian transects
Roseate spoonbill	*Ajaia ajaja*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Limpkin	*Aramus guarauna*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Crested caracara	*Caracara plancus*	T	T	No	not likely	not observed during preliminary pedestrian transects
Piping plover	*Charadrius melodus*	T	T	No	not likely	not observed during preliminary pedestrian transects
Southern American kestrel	*Falco sparverius paulus*	N	T	No	not likely	not observed during preliminary pedestrian transects
Florida sandhill crane	*Grus canadensis pratensis*	N	T	No	not likely	not observed during preliminary pedestrian transects
American oystercatcher	*Haematopus palliatus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects

Table 2: Continued.

E. Mammals

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Southeastern beach mouse	*Peromyscus polionotus niveiventris*	T	T	No	not likely	not observed during preliminary pedestrian transects
Sherman's fox squirrel	*Sciurus niger shermani*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
West Indian manatee	*Trichechus manatus*	E	E	No	not likely	not observed during preliminary pedestrian transects
Florida mouse	*Podomys floridanus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects

F. Vascular Plants

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Curtiss' milkweed	*Asclepias curtissii*	N	E	No	not likely	not observed during preliminary pedestrian transects
Sand-dune spurge	*Chamaesyce cumulicola*	N	E	No	not likely	not observed during preliminary pedestrian transects
Piedmont jointgrass	*Coelorachis tuberculosa*	N	E	No	not likely	not observed during preliminary pedestrian transects
Large-flowered rosemary (scrub mint)	*Conradina grandiflora*	N	E	No	not likely	not observed during preliminary pedestrian transects
Lakela's mint	*Dicerandra immaculata*	E	E	No	not likely	not observed during preliminary pedestrian transects
Johnson's seagrass	*Halophila johnsonii*	PT	E	No	not likely	not observed during preliminary pedestrian transects
Fragrant prickly apple	*Harrisia fragrans*	E	N	No	not likely	not observed during preliminary pedestrian transects
Nodding pinweed	*Lechea cernua*	N	T	No	not likely	not observed during preliminary pedestrian transects
Burrowing four o'clock	*Okenia hypogaea*	N	E	No	not likely	not observed during preliminary pedestrian transects
Tiny polygala	*Polygala smallii*	E	E	No	not likely	not observed during preliminary pedestrian transects
Tampa vervain	*Glandularia tampensis*	N	E	No	not likely	not observed during preliminary pedestrian transects

Table 2: Continued.

Florida bear grass	*Nolina atopocarpa*	N	T	No	not likely	not observed during preliminary pedestrian transects
Terrestrial peperomia	*Pereromia humilis*	N	E	No	not likely	not observed during preliminary pedestrian transects
Blunt-leaved peperomia	*Peperomia obtusifolia*	N	E	No	not likely	not observed during preliminary pedestrian transects
Scentless vanilla	*Vanilla mexicana*	N	E	No	not likely	not observed during preliminary pedestrian transects

+Federal Status: U.S. Fish and Wildlife Service (FWS)

E	- Endangered
PE	- Proposed for Endangered
T	- Threatened
PT	- Proposed for Threatened
C	- Candidate for Endangered and/or Threatened
E (S/A)	- Endangered due to similarity of appearance
T (S/A)	- Threatened due to similarity of appearance
N	- Not currently listed

++State of Florida Status: Florida Fish and Wildlife Conservation Commission (FFWCC)

Animals:

E	- Endangered
T	- Threatened
SSC	- Species of Special Concern
N	- Not currently listed
SSC*	- Monroe County only

Plants:

E	- Endangered
T	- Threatened
N	- Not currently listed

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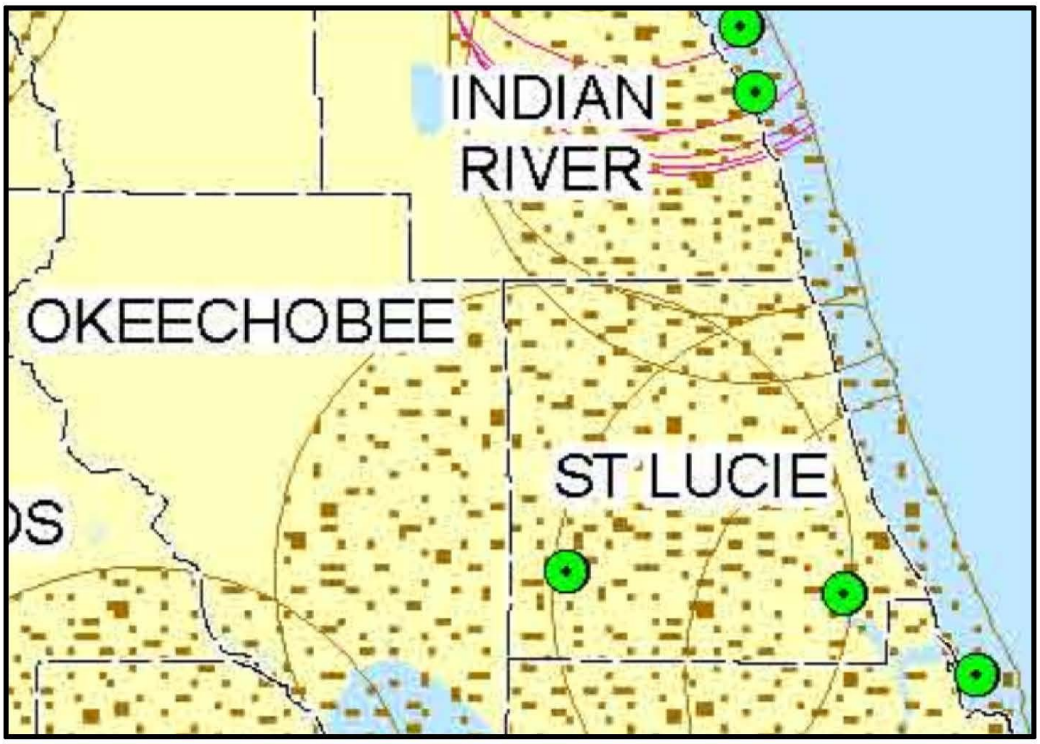
NOT A SURVEY

NORTH

0' 25000' 50000' 100000' 200000'

SCALE: 1" = 50000'



Wood Stork Nesting Colonies and Core Foraging Areas Active Within 2004-2013 in Florida

Foraging area active 2004-2013 (NFESO 6/8/2014):
North buffer 13 miles
Central buffer 15 miles
South buffer 18.6 miles

WOOD STORK (Mycteria americana)

SOURCE:http://www.fws.gov/northflorida/woodstorks/Documents/20131211_Wood_stork_FL_nesting_colonies_map_update_2013.pdf

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	08 - WOOD STORK ROOKERIES.DWG	1 APRIL 2015	8 OF 13
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
WOOD STORK NESTING COLONIES & CORE FORAGING AREAS

HSE Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

qon-site for this species. Additionally, although the site is within approximately 1.25 miles of Florida scrub-jay territory (Figure 9 of 13) there is no habitat on-site for this species.

4.02.1.1 Eastern Indigo Snake Programmatic Effect Determination Key

A. Project is not located in open water or salt marsh.....*go to* **B**

Project is located solely in open water of salt marsh..... *"no effect"*

B. Permit will be conditioned for use of the Service's *Standard Protection Measures For The Eastern Indigo Snake* during site preparation and project construction.....*go to* **C**

Permit will not be conditioned as above for the eastern indigo snake, or it is not known whether an applicant intends to use these measures and consultation with the Service is requested[2].....may affect"

C. There are gopher tortoise burrows, holes, cavities or other refugia where a snake could be buried or trapped and injured during project activities.....*go to* **D**

There are no gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities.....*"NLAA"*

D. The project will impact less than 25 acres or xeric habitat supporting less that 25 active and inactive gopher tortoise burrows.....*Go to* **E**

The project will impact more that 25 acres of xeric habitat or more than 25 active and inactive gopher tortoise burrows and consultation with the Service is requested[2].....*"may affect"*

E. Any permit will be conditioned such that all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrow[3]. If an indigo snake is encountered, the snake mist be allowed to vacate the area prior to additional site manipulation in the vicinity. Any permit will also be conditioned such that holes, cavities, and snake refugia other than gopher tortoise burrows will be inspected

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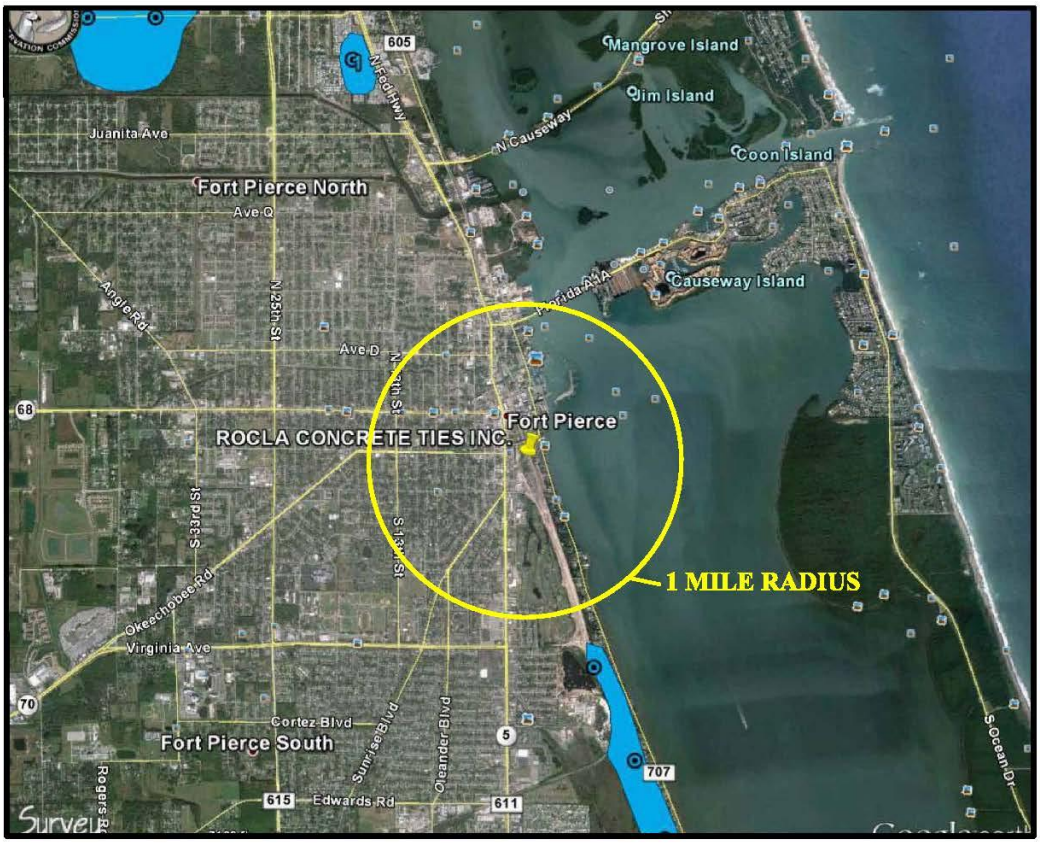
NOT A SURVEY

NORTH

0' 2500' 5000' 10000' 20000'

SCALE: 1" = 5000'



FLORIDA SCRUB-JAY (Aphelocoma coerulescens)

NO FLORIDA SCRUB-JAY HABITAT EXISTS ON-SITE.

SOURCE:http://atoll.floridamarine.org/Quickmaps/KMZ_download-habitats.htm

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	09 - SCRUB JAY.DWG	1 APRIL 2015	9 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
FLORIDA SCRUB-JAY LOCATIONS

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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each morning before planned site manipulation of a particular area, and, if occupied by an indigo snake, no work will commence until the snake has vacated the vicinity of proposed work..... *NLAA*

Permit will not be conditioned as outlined above and consultation with the Service is requested[2].....*"may affect"*

[1]With an outcome of "no effect" of "NLAA" as outlined in this key, the requirements of section 7 of the Act are fulfilled for the eastern indigo snake and no further action is required.

[2]Consultation may be concluded informally or formally depending on project impacts.

[3] If excavating potentially occupioed burrows, active or inactive, individuals must first obtain state authorization via a FWC Authorized Gopher Tortoise Agent permit. The excavation method selected should also minimize the potential for injury of an indigo snake. Applicants should follow the excavation guidance provided within the most current Gopher Tortoise Permitting Guidelines found at http://myfwc.com/gophertortoise.

The project, as proposed is not likely to adversely affect (NLAA) the eastern indigo snake. Prior to construction, eastern indigo snake and gopher tortoise protection/education signs will be posted at the each construction entrance to the site (Figure 10 of 13). Additionally, pamphlets for both of these species will be handed out prior to onset of construction to futher familiarize the contractors with what to do if they spot an eastern indigo snake or a gopher tortoise after initiation of construction activities.

4.02.2 Protected Flora

During the pedestrian transects survey, biologists did not observe any species of plants listed by the Florida Department of Agriculture (FDA) or the FFWCC. State and Federally listed flora that potentially exist in St. Lucie County and their likelihood of occurrence within the project site boundaries are listed in Table 2.

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NOT A SURVEY



EASTERN INDIGO SNAKE AND GOPHER TORTOISE EDUCATIONAL POSTERS WILL BE POSTED DURING CONSTRUCTION.

AND

EASTERN INDIGO SNAKE AND GOPHER TORTOISE EDUCATIONAL PHAMPLETS WILL BE DISTRIBUTED TO THE CONSTRUCTION WORKERS .

SOURCE:HSE **PARCEL ID # 2410-805-0005-000-1**

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	10 - EIS GT PRO PLAN.DWG	1 APRIL 2015	10 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
EASTERN INDIGO SNAKE AND GOPHER TORTOISE PROTECTION PLAN

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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4.03 Vegetation (FLUCFCS)

Vegetation cover types within the project site boundaries include upland and disturbed categories. Vegetation associations present on-site were mapped using Level II and Level III of FLUCFCS. The classifications used represent the closest facsimile possible to the natural community present. The FLUCFCS map is depicted in Figure 11 of 13. Photographs of the project site are provided in Appendix B.

4.03.1 Vegetation Associations

4.03.1.1 *150 - Industrial (+/-7.547 acres)*

This designation covers the entire site, part of which has been developed and part of which has been previously cleared and contains a great deal of debris from adjacent industrial sites. Vegetation includes occasional cabbage palm (*Sabal palmetto*), Brazilian pepper (*Schinus terebinthifolius*),tough bumelia (*Sideroxylon tenax*), grapevine (*Vitis rotundifolia*), bamboo vine (*Smilax* spp.), periwinkle (*Catharanthus roseus*), Virginia creeper (*Parthenocissus quinquefolia*), cogongrass (*Imperata cylindrica*), dog fennel (*Eupatorium capillifolium*), annual ragweed (*Ambrosia artemisiifolia*), prickly pear cactus (*Opuntia* sp.), chalky bluestem (*Andropogon capillipes*), wiregrass (*Aristida stricta*), tickseed (*Coreopsis* sp.), rosary pea (*Abrus precatorius*), senna (*Cassia* sp.) and raspberry (*Rubus* sp.).

4.03.2 Tree Protection

The City of Fort Pierce Code of Ordinances (CFPCOO), Chapter 22, Article XII, Division 3, Section 22-192 states that no person shall, directly or indirectly, cut down, substantially alter, destroy, remove, relocate, damage or authorize any suich act involving a protected tree situated on land within the city, without first obtaining a tree removal permit. Protected vegetation includes all native vegetation. Section 22-194 states that all native trees, 14" or greater diameter at breast height (DBH), except for palms which have a minimum clear trunk of ten (10) feet shall be preserved and protected in accordance with this article. Mitigation is required for the

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



LEGEND

150 - INDUSTRIAL (7.54± ACRES)

SOURCE: LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM, HANDBOOK 1999 DEPARTMENT OF TRANSPORATION.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	11 - FLUCFCS MAP.DWG	1 APRIL 2015	11 OF 13
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
FLUCFCS (VEGETATION) MAP

Hobe Sound Environmental Consultants Inc.
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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loss of any native trees, 14" or greater diameter at breast height (DBH), except for palms which have a minimum clear trunk of ten (10) feet. It is HSE's opinion that protected trees, comprising cabbage palm trees with over 10' clear trunk may occur on-site. Mitigation will be required for impacts to these cabbage palms.

4.04 Jurisdictional Wetlands

It is HSE's opinion that there are no (0) State (SFWMD) or Federal (USACE) jurisdictional wetlands on the project site.

4.05 Soils

The United States Department of Agriculture, SCS, has mapped the surficial soil types within the project site. The resulting soil delineations were published in the *Soil Survey of St. Lucie County Area, Florida*, March 1980. SCS soil types are mapped on Figure 12 of 13.

Detailed and complete descriptions of each of these soil communities are presented in the St. Lucie County Soil Survey, and therefore, are not included herein. However, a general description of the soils is included in Table 3. This table also represents estimated area of soil by types, physical properties, and degree of limitation of various soil types mapped, as excerpted from the SCS published data.

Soil types mapped by the SCS are generally limited to the upper 60 to 72 inches of the soil profile and are distinguished by several factors. These factors include soil drainage, topography, presence or absence of restrictive or clayey hardpan type soils, and the depth and range in fluctuation of the groundwater table associated with each soil type. SCS soil classifications are considered good early indicators and a reasonable database for a preliminary evaluation of the suitability of lands for certain uses.

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



LEGEND

4 - ARENTS, 0 TO 5 PERCENT SLOPES
47 - URBAN LAND

SOURCE: http://websoilsurvey.sc.egov.usda/App/WebSoilSurvey.aspx

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	12 - SCS SOIL MAP.DWG	1 APRIL 2015	12 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
SCS SOIL MAP

Hobe Sound Environmental Consultants Inc.
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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Table 3. Soil Descriptions*.

Soil Name and Map Number	Brief Soil Description	Seasonal High Water Table		Permeability Rate		Degree and Kind of Limitation		Hydrologic Group
		Depth (ft.)	Duration (mos.)	Depth (in.)	Rate (in/hr)	Dwelling w/o basement	Aquifer fed excavated Ponds (water mgmt)	
Arents, 0-5% slopes (4)	This soil consists of soil material dug from several areas that have different kinds of soil.	---	---	---	---	---	---	---
Urban Land (47)	Urban land consists of areas that are more than 70% covered by airports, shoppiong centers, parking lots, large buildings, streets and sidewalks. The surface of these soils, to a depth of about 12 inches, has been covered wth fill material consisting of sandy and loamy materials which contain limestone and shell fragments in places. Urban land is not places in a cpability subclass.	---	---	---	---	---	---	---

*Source: U.S. Department of Agriculture, Soil Conservation Service, *Soil Survey of St. Lucie County Area, Florida*; March 1980.

4.06 Topography

According to the USGS Topographic Map, *Ankona Quadrangle, 7.5 Minute Series*, site elevation runs from approximately 20-25' NGVD. Figure 13 of 13 depicts the USGS Topographic Map for the project site.

4.07 Archaeological/Historical Review

HSE contacted the State Historical Preservation Officer (SHPO) to request that they review their files for any known historical and/or archaeological sites that may occur within the boundaries of the project site (Appendix A).

The Applicant has no knowledge of any historical and/or archaeological sites located within the project boundaries. During construction, if any historical and/or archaeological artifacts are recovered, work will cease and desist immediately, and the site will be coordinated with SHPO.

5.00 CONCLUSIONS

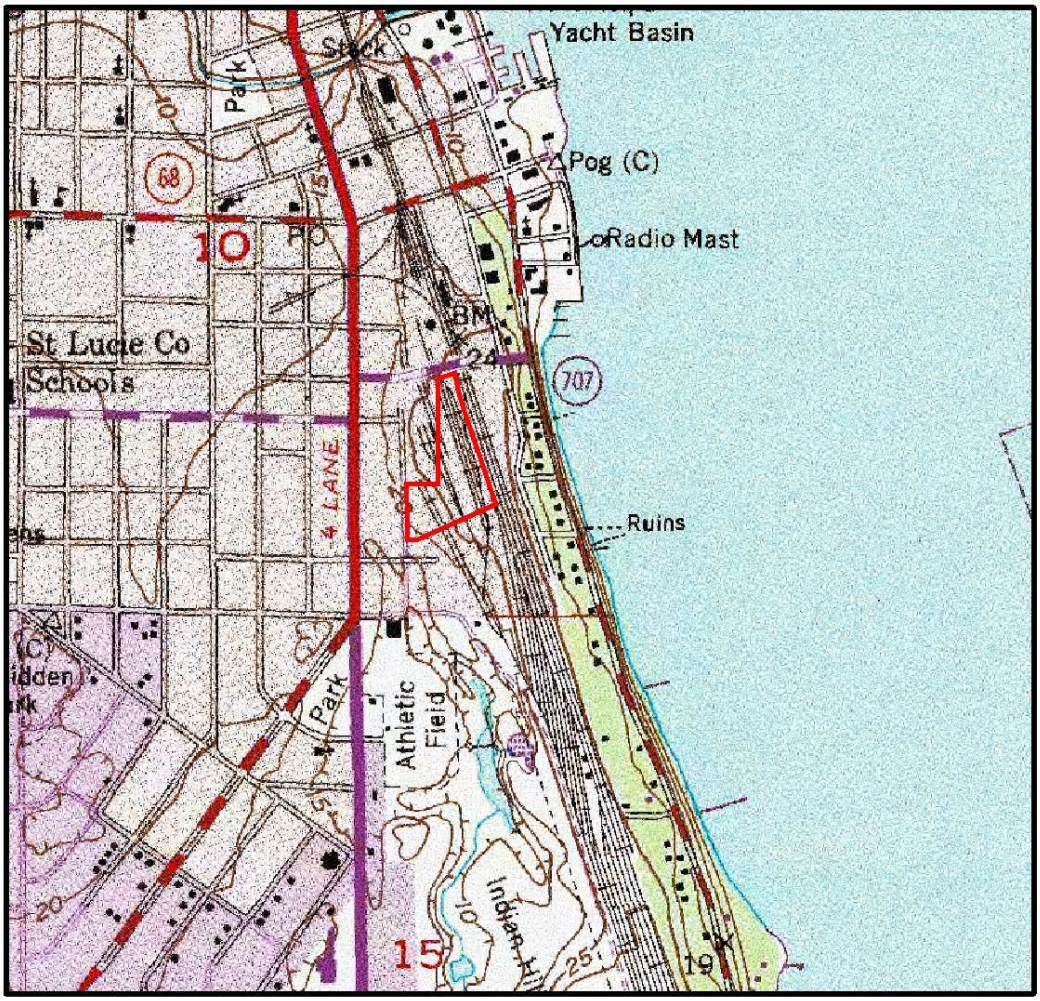
- One (1)potentially occupied gopher tortoise burrows was located on-site.
- The estimated gopher tortoise population for the project site is one (1).
- A relocation permit may be obtained from the FFWCC to relocate the gopher tortoise to an off-site preserve.
- The Florida mouse was not observed on-site during this survey, and suitable habitat does not exist on-site.
- The eastern indigo snake and Florida gopher frog were not observed on-site during this environmental survey; however, habitat for these species does exist on-site.

NOT A SURVEY

NORTH

0' 500' 1000' 2000' 4000'

SCALE: 1" = 1000'



SOURCE:USGS TOPOGRAPHIC MAP FORT PIERCE, FLORIDA QUADRANGLE, 7.5 MINUTE SERIES 27080-D3-TF-024. PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	13 - TOPO MAP.DWG	1 APRIL 2015	13 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
USGS TOPOGRAPHIC MAP

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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- An eastern indigo snake protection plan should be implemented and coordinated with the Florida Fish and Wildlife Conservation Commission (FFWCC) prior to site clearing and development.

- The eastern indigo snake programmatic effect determination key was utilized for the project site and it was determined that the project, as proposed, would not likely adversely affect the eastern indigo snake.

- Prior to construction, eastern indigo snake and gopher tortoise protection/education posters shall be installed at all construction entrances to the site and pamphlets for each species will be handed out to personnel on-site.

- There is no habitat on-site for either the Florida scrub-jay or the wood stork.

- According to the City of Fort Pierce, all native trees having a DBH of 14" or more or cabbage palms having a minimum clear trunk of 10' must be located by a professional surveyor. Cabbage palms with a minimum clear trunk of 10' may occur on-site. According to CFPCOO Chapter 22, Article XII, Division 3, Section 22-194, removal of these trees will require a vegetation removal permit and mitigation to consist of compensatory tree planting.

- It is HSE's opinion that protected and/or specimen trees (cabbage palms) may occur on the project site.

- It is HSE's opinion that no (0) State (SFWMD) or Federal (USACE) jurisdictional wetlands occur on-site.

APPENDIX A

Agency Contacts

HSE #15-009.01 A 1 April 2015

HOBE SOUND
ENVIRONMENTAL CONSULTANTS, INC.
9512 S.E. DUNCAN STREET
HOBE SOUND, FLORIDA 33455
PHONE: (772) 545-3676 CELL (772) 260-0857
E-MAIL: bobhsenv@gmail.com

1 April 2015

Ms. Janice Stearns
Florida Fish and Wildlife Conservation Commission
Office of Environmental Services
620 S. Meridian Street
Tallahassee, FL. 32399-1600

Via: E-mail: *gisrequest@fwc.com*

Re: Rocla Concrete Ties, Inc, ±7.547 acres of land located south of Citrus Avenue, east of South 3rd Street, north of Florida Avenue and west of the Florida East Coast Railway tracks. The project site is located in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

Latitude: 27°26'30.923"
Longitude: W80°19'25.462"

Dear Ms. Stearns:

Hobe Sound Environmental Consultants, Inc. (HSE) has been retained to conduct an endangered species survey on the above-referenced project site. Please review your files for records of any listed species that may occur on this site. The protected species survey was conducted according to Florida Fish and Wildlife Conservation Commission (FFWCC) guidelines. I have attached a location map and aerial photograph of the project site for your convenience.

Your immediate attention and cooperation regarding this matter is appreciated. Please feel free to contact me if you have any questions or require any additional information. **Please reference our project #15--009.01 when responding to this request.**

Sincerely,
Freda R. Posin
Freda R. Posin
Senior Environmental Specialist

Attachment
cc: File #15-009.01

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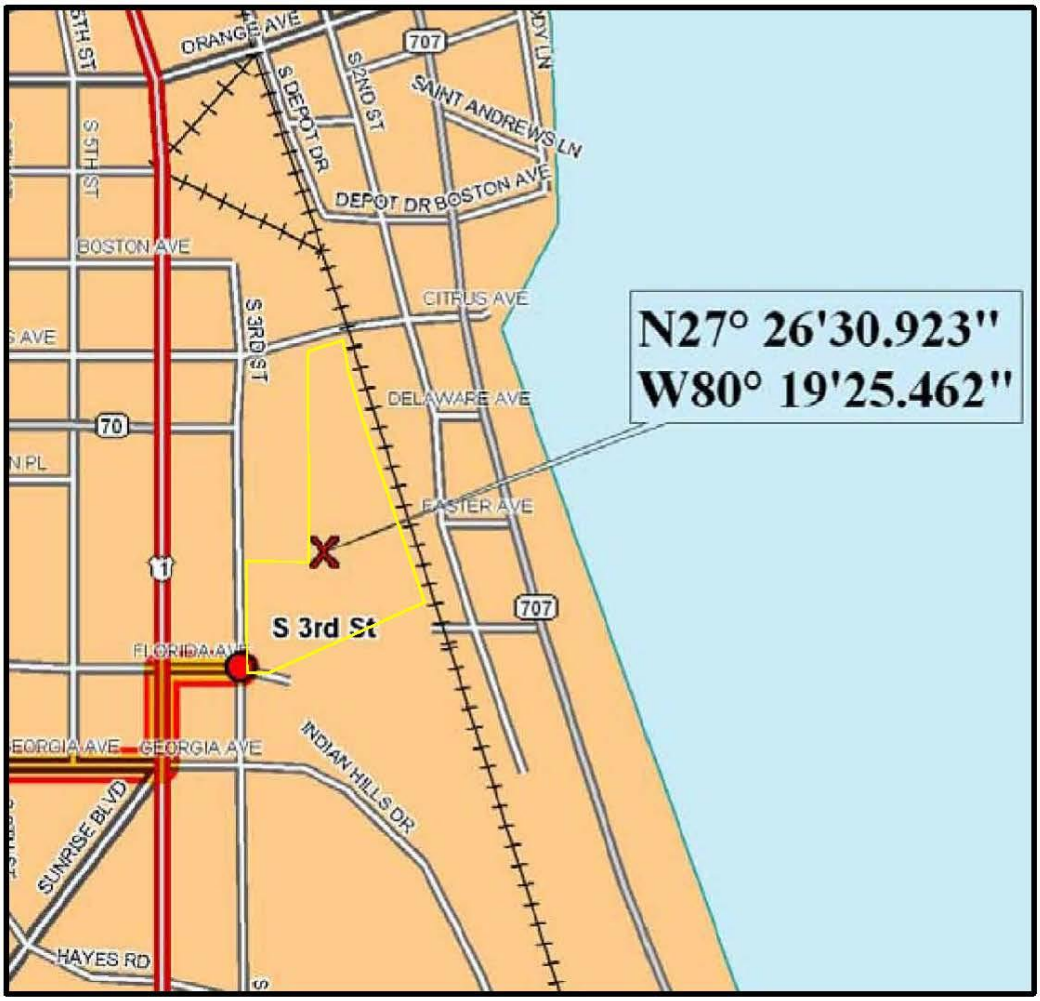
NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	02 - LOCATION MAP.DWG	1 APRIL 2015	2 OF 13
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
LOCATION MAP

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



SOURCE:ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
2014 AERIAL PHOTOGRAPH

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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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HOBE SOUND
ENVIRONMENTAL CONSULTANTS, INC.
9512 S.E. DUNCAN STREET
HOBE SOUND, FLORIDA 33455
PHONE: (772) 545-3676 CELL (772) 260-0857
E-MAIL: bobhsenv@gmail.com

25 March 2015

Mr. Frederick Gaske, Director
Florida State Historic Preservation Program
Bureau of Historic Preservation
Division of Historical Resources
R.A. Gray Building
500 South Bronough Street, 4th Floor
Tallahassee, Florida 32399-0250

Re: Rocla Concrete Ties, Inc, ±7.547 acres of land located south of Citrus Avenue, east of South 3rd Street, north of Florida Avenue and west of the Florida East Coast Railway tracks. The project site is located in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

Latitude: 27°26'30.923"
Longitude: W80°19'25.462"

Dear Mr. Gaske:

The Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (COE) have requested that the Applicant contact your office and request a review of the above referenced project site. Please consider this letter as a formal request for your office to review the above referenced project site for the presence of any historical or archaeological properties within the project area.

The project site encompasses approximately 27.52 acres of land. Approximately half of the site was previously in citrus. Following is a brief description of the vegetation associations noted on-site.

150 - Industrial (±7.54 acres)
This designation covers the entire site, part of which has been developed and part of which has been previously cleared and contains a great deal of debris from adjacent industrial sites. Vegetation includes occasional cabbage palm (*Sabal palmetto*), Brazilian pepper (*Schinus terebinthifolius*),tough bumelia (*Sideroxylon tenax*), grapevine (*Vitis rotundifolia*), bamboo vine (*Smilax* spp.), periwinkle (*Catharanthus roseus*), Virginia creeper (*Parthenocissus quinquefolia*), cogongrass (*Imperata cylindrica*), dog fennel (*Eupatorium capillifolium*), annual ragweed (*Ambrosia artemisiifolia*), prickly pear cactus (*Opuntia* sp.), chalky bluestem

(*Andropogon capillipes*), wiregrass (*Aristida stricta*), tickseed (*Coreopsis* sp.), rosary pea (*Abrus precatorius*), senna (*Cassia* sp.) and raspberry (*Rubus* sp.).

I am attaching a Vicinity Map, Location Map, Aerial Photograph, FLUCFCS Map, Soils Map, Topographic Map and photographs of the project site for your use and files. Your cooperation regarding this matter is appreciated. Please contact my office if you have any questions or comments regarding this matter. *Please respond to our project #15-009.01 when responding to this request.*

Sincerely,

Freda R. Posin

Freda R. Posin
Sr. Environmental Scientist

Attachments
cc: File #15-009.01

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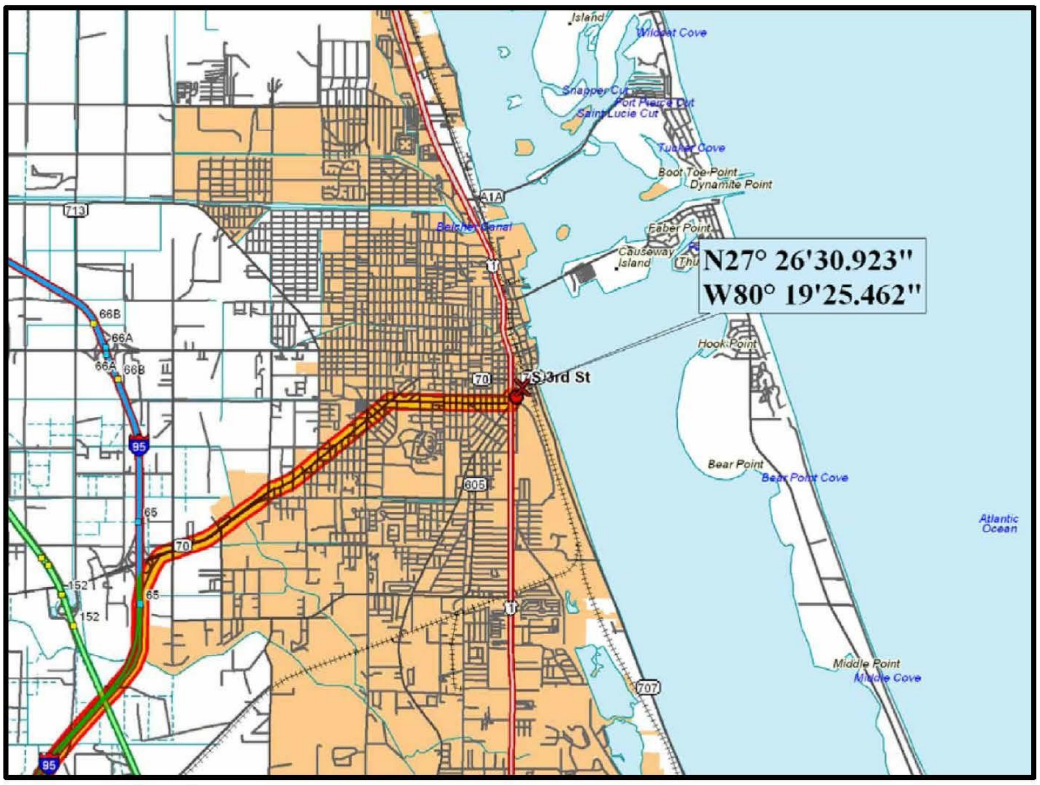
NOT A SURVEY

NORTH

0' 4000' 8000' 16000' 32000'

SCALE: 1" = 8000'



DIRECTIONS:

		Dist	Turn		Road	Near	Exit	Time	Total Dist
					I-95 S				
	in	0.00 mi	Start(N)		I-95 N			0:00:00	0.00 mi
	in	0.10 mi	Bear right(NNE)	on to	Okeechobee Rd Ramp			0:00:07	0.10 mi
	in	0.55 mi	Bear right(ENE)	on to	Okeechobee Rd			0:01:26	0.65 mi
	in	1.30 mi	Bear right(NE)	on to	SR 70 (Okeechobee Rd)			0:04:58	1.94 mi
	in	1.59 mi	Bear right(E)	on to	Georgia Ave			0:08:46	3.53 mi
	in	1.24 mi	Turn left(N)	on to	US 1 (S US 1|SR 5|S Federal Hwy|S 4...			0:10:53	4.77 mi
	in	0.07 mi	Turn right(E)	on to	Florida Ave			0:11:03	4.84 mi
	in	0.08 mi	Finish	at	Florida Ave			0:11:22	4.92 mi

Total Time: 0:11:22 Total Distance: 4.92 mi

SOURCE: DELORME STREET ATLAS USA,DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	01 - VICINITY MAP	1 APRIL 2015	1 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
VICINITY MAP

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

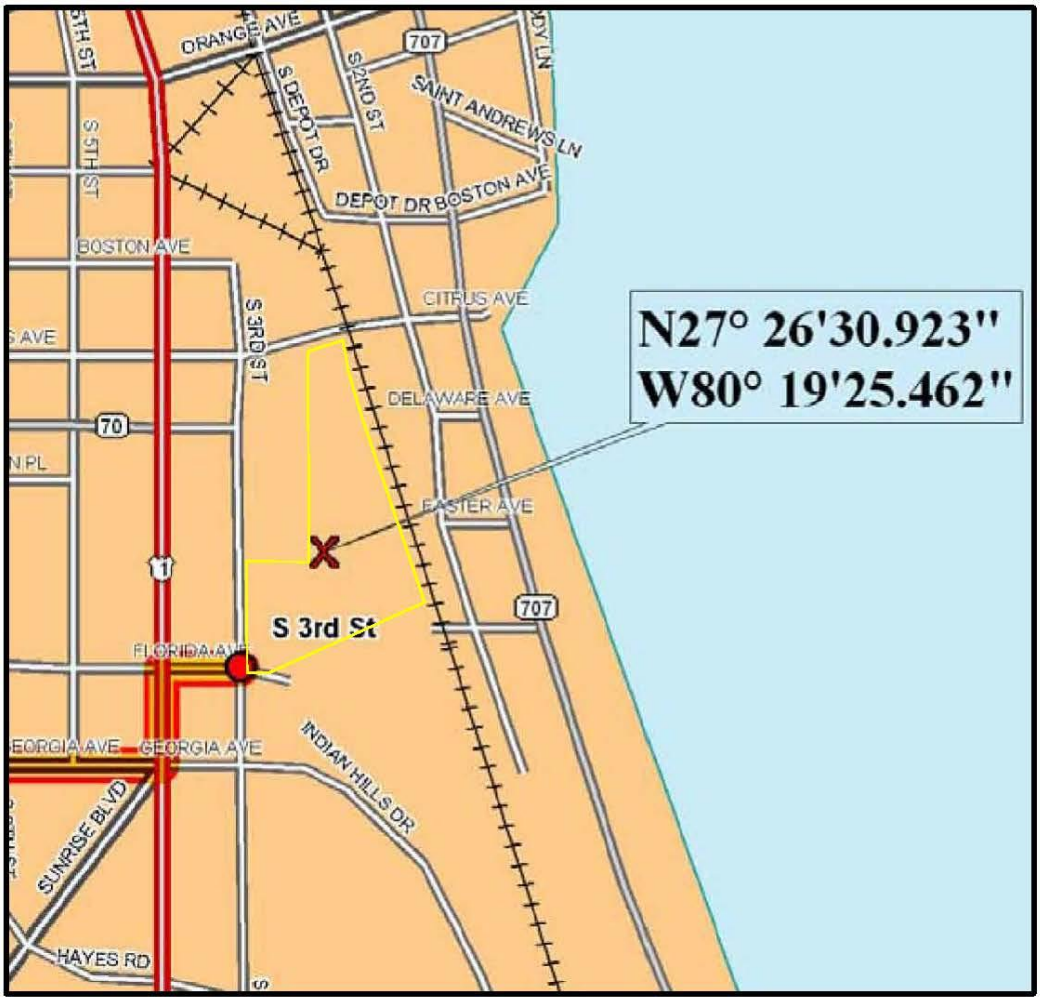
Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	02 - LOCATION MAP.DWG	1 APRIL 2015	2 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
LOCATION MAP

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(772) 545-3676, E-mail: bobhsenv@gmail.com

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



SOURCE:ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
2014 AERIAL PHOTOGRAPH

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



LEGEND

150 - INDUSTRIAL (7.54± ACRES)

SOURCE: LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM, HANDBOOK 1999 DEPARTMENT OF TRANSPORATION.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	11 - FLUCFCS MAP.DWG	1 APRIL 2015	11 OF 13
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
FLUCFCS (VEGETATION) MAP

HSE Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



LEGEND

4 - ARENTS, 0 TO 5 PERCENT SLOPES
47 - URBAN LAND

SOURCE: http://websoilsurvey.sc.egov.usda/App/WebSoilSurvey.aspx

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	12 - SCS SOIL MAP.DWG	1 APRIL 2015	12 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
SCS SOIL MAP

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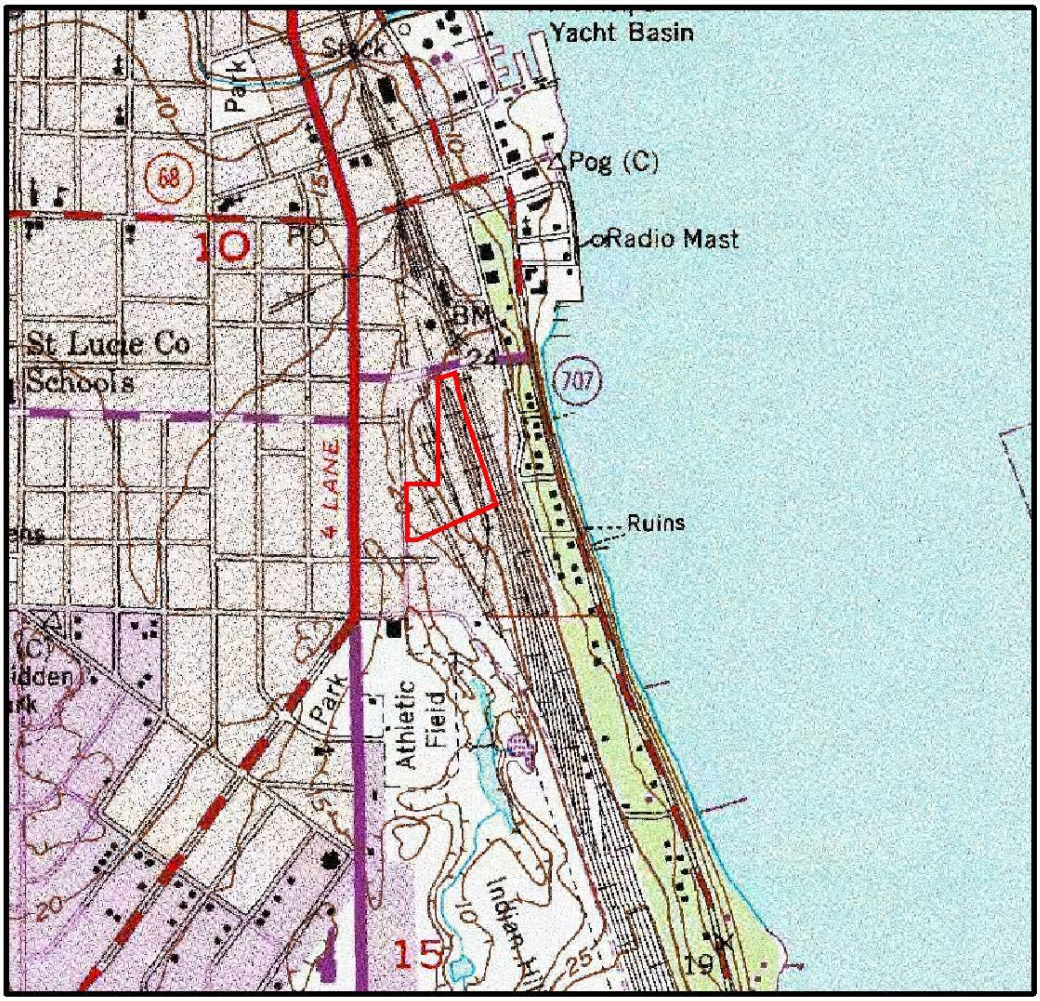
NOT A SURVEY

NORTH

0' 500' 1000' 2000' 4000'

SCALE: 1" = 1000'



SOURCE:USGS TOPOGRAPHIC MAP FORT PIERCE, FLORIDA QUADRANGLE, 7.5 MINUTE SERIES 27080-D3-TF-024. PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	13 - TOPO MAP.DWG	1 APRIL 2015	13 OF 13
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
USGS TOPOGRAPHIC MAP

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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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~~Strike Through~~ is for Deletion from prior submission

SOURCE: PHOTOGRAPHS BY HSE



PHOTOGRAPH #01: AT ROAD ALONG EASTERN SITE BOUNDARY, LOOKING NORTHWEST TOWARD CITRUS AVE.



PHOTOGRAPH #02: LOOKING NORTHEAST TOWARD CITRUS AVE. FROM SOUTH END OF PROPERTY ADJACENT TO FEC RR TRACKS



PHOTOGRAPH #03: PRICKLY PEAR CACTUS IN WEST CENTRAL PORTION OF SITE



PHOTOGRAPH #04: CONCRETE RUBBLE LEFT ON-SITE



PHOTOGRAPH #05: LOOKING NORTHEAST FROM SOUTHWEST PORTION OF SITE



PHOTOGRAPH #06: GOPHER TORTOISE AT HIS BURROW NEAR FEC RR TRACKS

PARCEL ID # 3414-503-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: APP B PHOTOS.DWG	DATE: 1 APRIL 2015	APPENDIX B FIGURE: 1 OF 1
	10	35S	40E				
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
SITE PHOTOGRAPHS

H S E
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9512 SE Duncan Street
Hobe Sound, FL 33455
(772)545-3676, E-mail: bobhseav@gmail.com

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HOBE SOUND
ENVIRONMENTAL CONSULTANTS, INC.
9512 S.E. DUNCAN STREET
HOBE SOUND, FLORIDA 33455
PHONE: (772) 545-3676 CELL (772) 260-0857
E-MAIL: bobhsenv@gmail.com

1 April 2015

Ms Dana Hartley
U.S. Fish and Wildlife Service
P.O. Box 2676
Vero Beach, Florida 32960-2676

Re: Rocla Concrete Ties, Inc., City of Fort Pierce, St. Lucie County, Florida, Section 10, Township 35S, Range 40E.

Latitude: 27°26'30.923"
Longitude: W80°19'25.462"

Via E-mail: dana_hartley@fws.gov

Dear Ms. Hartley:

Hobe Sound Environmental Consultants, Inc. (HSE) has been retained to conduct an endangered species survey on the above referenced project site. Please review your files for records of any listed species that may occur on this site. The protected species survey will be conducted according to Florida Fish and Wildlife Conservation Commission (FFWCC) guidelines. I have attached a location map of the project area for your convenience.

Your immediate attention and cooperation regarding this matter are appreciated. Please feel free to contact me if you have any questions or require additional information concerning this matter. Please reference our file #15-009.01 when responding to this letter.

Sincerely,

Freda R. Posin

Freda R. Posin
Senior Environmental Scientist

/frp
Attachment

cc: File #15-009.01

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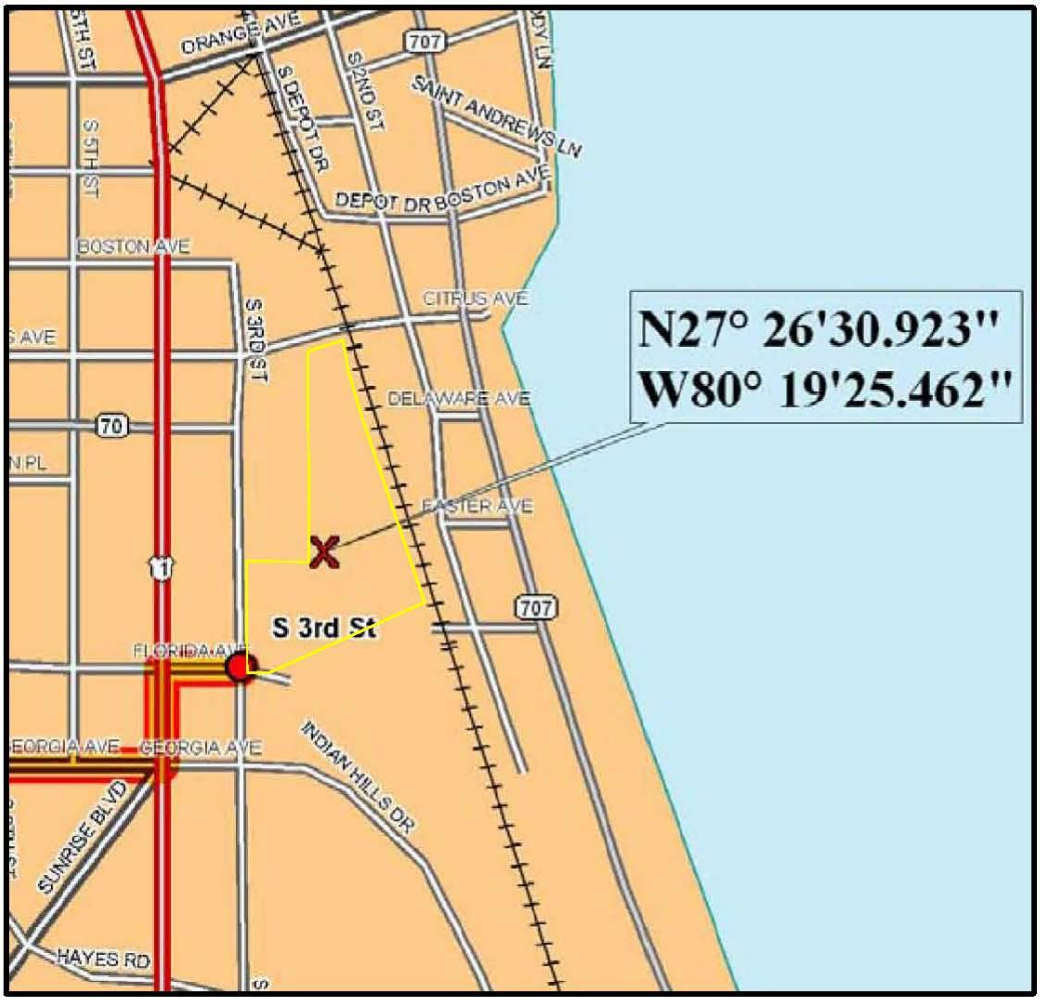
NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	02 - LOCATION MAP.DWG	1 APRIL 2015	2 OF 13
LATITUDE: 27°26'30.923"				LONGITUDE: -80°19'25.462"	DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
LOCATION MAP

Hobe Sound Environmental Consultants Inc.
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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4/2/2015 FNAI Biodiversity Matrix

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
850-681-9364 fax
www.fnai.org

FLORIDA Natural Areas INVENTORY

Florida Natural Areas Inventory

Biodiversity Matrix Query Results

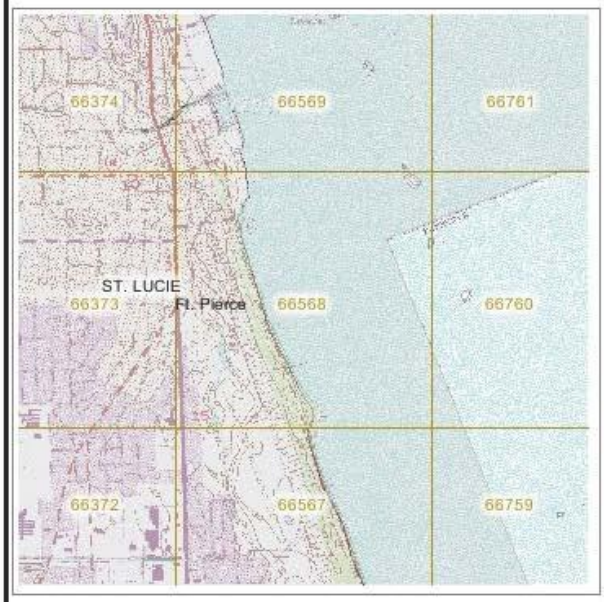
UNOFFICIAL REPORT

Created 4/2/2015

(Contact the FNAI Data Services Coordinator at 850.224.8207 for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

Report for 1 Matrix Unit: 66568



Descriptions

DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.

DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.

LIKELY - The species or community is *known* to occur in this vicinity, and is considered likely within this Matrix Unit because:

1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; *or*
2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.

POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.

Matrix Unit ID: 66568

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

1 **Likely** Element Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Trichechus manatus Manatee	G2	S2	LE	FE

Underline is for Addition from prior submission
~~Strike Through~~ is for Deletion from prior submission

Matrix Unit ID: 66568
20 **Potential** Elements for Matrix Unit 66568

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Acipenser oxyrinchus oxyrinchus Atlantic Sturgeon	G3T3	S1	PS:LE,LT	SSC
Athene cunicularia floridana Florida Burrowing Owl	G4T3	S3	N	SSC
Coelorachis tuberculosa Piedmont Jointgrass	G3	S3	N	LT
Conradina grandiflora Large-flowered Rosemary	G3	S3	N	LT
Ctenogobius stigmaturus Spottail Goby	G2	S2	N	N
Drymarchon couperi Eastern Indigo Snake	G3	S3	LT	FT
Eretmochelys imbricata Hawksbill Sea Turtle	G3	S1	LE	FE
Forestiera segregata var. pinetorum Florida Pinewood Privet	G4T2	S2	N	N
Glandularia maritima Coastal Vervain	G3	S3	N	LE
Gopherus polyphemus Gopher Tortoise	G3	S3	C	ST
Halophila johnsonii Johnson's Seagrass	G2	S2	LT	N
Lechea cernua Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii Small's Flax	G2T2	S2	N	LE
Pituophis melanoleucus mugitus Florida Pine Snake	G4T3	S3	N	SSC
Pteroglossaspis ecristata Giant Orchid	G2G3	S2	N	LT
Rivulus marmoratus Mangrove Rivulus	G4G5	S3	SC	SSC
Rostrhamus sociabilis plumbeus Snail Kite	G4G5T2	S2	LE	FE
Sceloporus woodi Florida Scrub Lizard	G2G3	S2S3	N	N
Sciurus niger shermani Sherman's Fox Squirrel	G5T3	S3	N	SSC
Setophaga discolor paludicola Florida Prairie Warbler	G5T3	S3	N	N

Disclaimer
The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

Unofficial Report

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These results are considered unofficial. FNAI offers a Standard Data Request option for those needing certifiable data.

APPENDIX B

Project Site Photographs

HSE #15-09.01 B 1 April 2015

SOURCE: PHOTOGRAPHS BY HSE



PHOTOGRAPH #01: AT ROAD ALONG EASTERN SITE BOUNDARY, LOOKING NORTHWEST TOWARD CITRUS AVE.



PHOTOGRAPH #02: LOOKING NORTHEAST TOWARD CITRUS AVE. FROM SOUTH END OF PROPERTY ADJACENT TO FEC RR TRACKS



PHOTOGRAPH #03: PRICKLY PEAR CACTUS IN WEST CENTRAL PORTION OF SITE



PHOTOGRAPH #04: CONCRETE RUBBLE LEFT ON-SITE



PHOTOGRAPH #05: LOOKING NORTHEAST FROM SOUTHWEST PORTION OF SITE



PHOTOGRAPH #06: GOPHER TORTOISE AT HIS BURROW NEAR FEC RR TRACKS

PARCEL ID # 2416-[illegible]-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: APP B PHOTOS.DWG	DATE: 1 APRIL 2015	APPENDIX B FIGURE: 1 OF 1
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
SITE PHOTOGRAPHS

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, Fl. 33455
(772)545-3676, E-mail: bobhsenv@gmail.com

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SECTION VII

PETITION FOR CHANGE IN ZONING TO PLANNED DEVELOPMENT ZONING DISTRICT

DUST CONTROL/MITIGATION PLAN (GENERALIZED)

As part of the concrete tie manufacturing process, raw materials will be used that could present minor potential for dust emissions. This is summary is to explain the cement use procedures and dust mitigation methods utilized by Rocla Concrete Tie, Inc. (Rocla) in the production of prestressed concrete railroad ties.

The technology for the collection and use of cement and other pozzolan materials has vastly improved since the time that Rinker installed and operated their facility and cement silos in the Port of Fort Pierce. Rocla always procures the top of the line dust mitigation accessories and products for their batch plant and storage bins, and over the years has developed additional methods to reduce the amount of dust produced by our operations.

The materials storage bins used in our operations are a completely sealed system and are never exposed to the open air for any reason. When cement arrives to our facility, it is blown directly into the storage bins via a sealed pipe or hose. At the top of the storage bin sits a Belgrade Steel Tank Co. “belle” style dust house, containing polyester filters, which collect any excess dust with a 99.99% efficiency (cut sheets attached). These filters are then vibrated after each load of material has been blown in, which causes all of the collected excess dust to fall into the storage bin. This process effectively cleans the dust house and readys it for the next delivered load of material.

Cement is delivered from the storage bin into a weigh hopper located above the mixer, via a closed-pipe screw conveyor. Emissions from the weigh hopper are controlled by a dustproof transition piece and venting hose that vents emissions directly back into the mixer. There is no outside venting in this process

Sand and Rock materials are delivered to the plant via dump trucks and offloaded directly into a walled, aggregates storage area. These stockpiles will be enclosed on three sides by concrete walls to control wind erosion. In addition to the concrete enclosure, the stockpiles are watered twice daily to maintain moisture content, promote evaporative cooling, and further minimize wind erosion. The sand and rock are then delivered to covered storage bins via a front-end loader. These bins have hydraulic lids that only open to permit the deposit the aggregates and will remain closed at all other times, further mitigating wind erosion effects.

The aggregates are batched into aggregate weigh hoppers located inside the batch plant building enclosure. The sand, rock, cement, flyash and water are deposited into the concrete mixer for mixing. Emissions at the mixer are controlled by polypropylene cartridges in the mixer dust filters. After mixing, the concrete is deposited directly into the casting mold, which takes place within the enclosure of the batching plant.

The finished product will be placed in a storage yard, the surface of which will be a compacted, washed aggregate. The rock to be used will be one that produces little to no dust, even with vehicular traffic and movement in this area. Additionally, this storage yard will be watered intermittently to mitigate any small amount of dust that may be produced from operating in this area.

Attached are cut sheets for some of the aforementioned equipment as well as pictures from an existing, fully operating, facility located in Italy that uses the same equipment with identical operational procedures as Rocla will be using in Fort Pierce. As you can see from the cut sheets, the efficiency for this equipment is 99.99% and from the pictures, this is a very clean operation with no apparent dust issues.










CLIVET







FABRIC FILTERS

Point Number (from flow diagram)	Manufacturer & Model No. (if available)
	Belgrade Steel Tank Co. - Belle 225
Name of Abatement Device	**Type of Particulate Controlled**
Belle 225 Dust House	Cement Dust

GAS STREAM CHARACTERISTICS

Flow Rate (acfm)		Gas Stream Temperature (°F)	Particulate Grain Loading (grain/scf)	
Design Maximum	**Average Expected**		**Inlet**	**Outlet**
675	675	Ambient	N/A	0.01

Pressure Drop (in H2O)	Water Vapor Content of Effluent Stream (lb water/lb dry air)	Fan Requirements (hp)	Fan Requirements (cubic ft/min)
5"	Ambient	N/A	N/A

PARTICULATE DISTRIBUTION

(by weight)

Micron Range	Inlet	Outlet
0.0 - 0.5	0%	99.98%
0.5 - 1.0	3%	0.02%
1.0 - 5.0	17%	0.00%
5.0 - 10.0	18%	0.00%
10.0 - 20.0	21%	0.00%
over 20.0	41%	0.00%

FILTER CHARACTERISTICS

Filtering Velocity (acfm/sq ft of cloth)	Bag Diameter (inches)	Bag Length (inches)	Number of Bags	Number of Compartments in Baghouse
3	8"	72"	18	1

Bag rows will be:	Walkways will be provided between banks of bags:
Staggered	No

Filtering Material: PE 37 100% Polyester 9oz.

Describe Bag Cleaning Method and Cycle: Air Vibrator Shaker

Capital Installed Cost: $2,200 **Annual Operating Cost:** $50

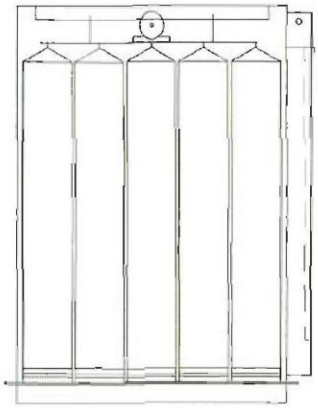
BELGRADE STEEL TANK CO., INC.

"BELLE" STYLE DUST HOUSE



"Belle" Filter Sock Specifications

Style	PE 37
Fiber	100% Polyester
Weight	9 oz./Sq. Yd.
Construction	Spun/Spun
Count	100W x 60F
Air Permeability	20-30 C.F.M.
Mullen Burst	500 PSI
Tensile Strength	Warp Direction 300#
	Fil Direction 275#
Max Operating Temp	275 Degrees F
Efficiency	99.99%



Square Ft. Bag Area	Cap. Cement
150	375 C.F.M.
225	675 C.F.M.

The dust house is equipped with either an air powered or electric powered vibrator used for cleaning of the bags. If air powered, connect air supply line to the 3/8" NPT coupling located on center above the door, and supply the vibrator with 80 psi oiled or non-oiled air. If electric powered, reconnect power cord which exits the top side of dust house to the control box supplied. Operate vibrator for approx. 10-15 minutes after each load of material has been blown in.

Jamieson Equipment Company | 5314 Palmero Court | Buford, GA 30518 | 800.875.0280 | sales@jamiesonequipment.com
www.jamiesonequipment.com

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SECTION VIII

PETITION FOR CHANGE IN ZONING TO PLANNED DEVELOPMENT ZONING DISTRICT

NOISE MITIGATION PLAN

Rocla Concrete Tie, Inc., will employ noise reduction measures to ensure that our planned facility will not be a nuisance to the City of Fort Pierce, nor exceed the City Code limits. Several modifications have been made to our basic production operations, and will be implemented at Rocla's new Fort Pierce facility. These modifications will provide benefits in reducing the noise levels emitted by the production equipment used at this facility, compared to similar manufacturing facilities at which noise studies have been completed.

In summary, we plan to install sound proof cabins at the concrete casting station as well as around the concrete mixer, and any other equipment which produces high noise levels. Additionally, there will be an automatic door that will only open to allow concrete to be delivered from the mixer into the main building. This door will remain closed at all other times, and therefore provide enhanced sound proofing. This feature will provide that whenever there are activities that create high levels of noise, both sound proof chambers will be closed.

There are also several architectural and civil features that are being added to the proposed building layout in order to mitigate noise beyond the area of the new manufacturing plant. These strategically placed masonry walls and landscaping barriers, as well as the employee parking lot, will help buffer and dampen the sound even further from the factory.

Each of the two planned production shifts will be scheduled to begin during off-peak hours and filling of the aggregate bins, or other activities that could cause noise, will be timed as to minimize noise levels away from early morning or late evening hours.

Based on noise level studies in similar plants, Rocla is confident that with the aid of these noise mitigation plans, the noise levels at the property line of our facility will not exceed the Fort Pierce code 70 db limits. Rocla is committed to do whatever it takes to ensure that our operations are not a nuisance to the nearby community or the City of Fort Pierce.

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SECTION VIII

PETITION FOR CHANGE IN ZONING TO PLANNED DEVELOPMENT ZONING DISTRICT

TRAFFIC IMPACT ASSESSMENT

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CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS

TRAFFIC IMPACT STUDY

For

ROCLA CROSSTIE FACILITY

In

The City of Fort Pierce

Prepared for

Rocla Concrete Tie, Inc.

Prepared By

Culpepper & Terpening, Inc.
2980 South 25th Street
Fort Pierce, FL 34981

April 2015



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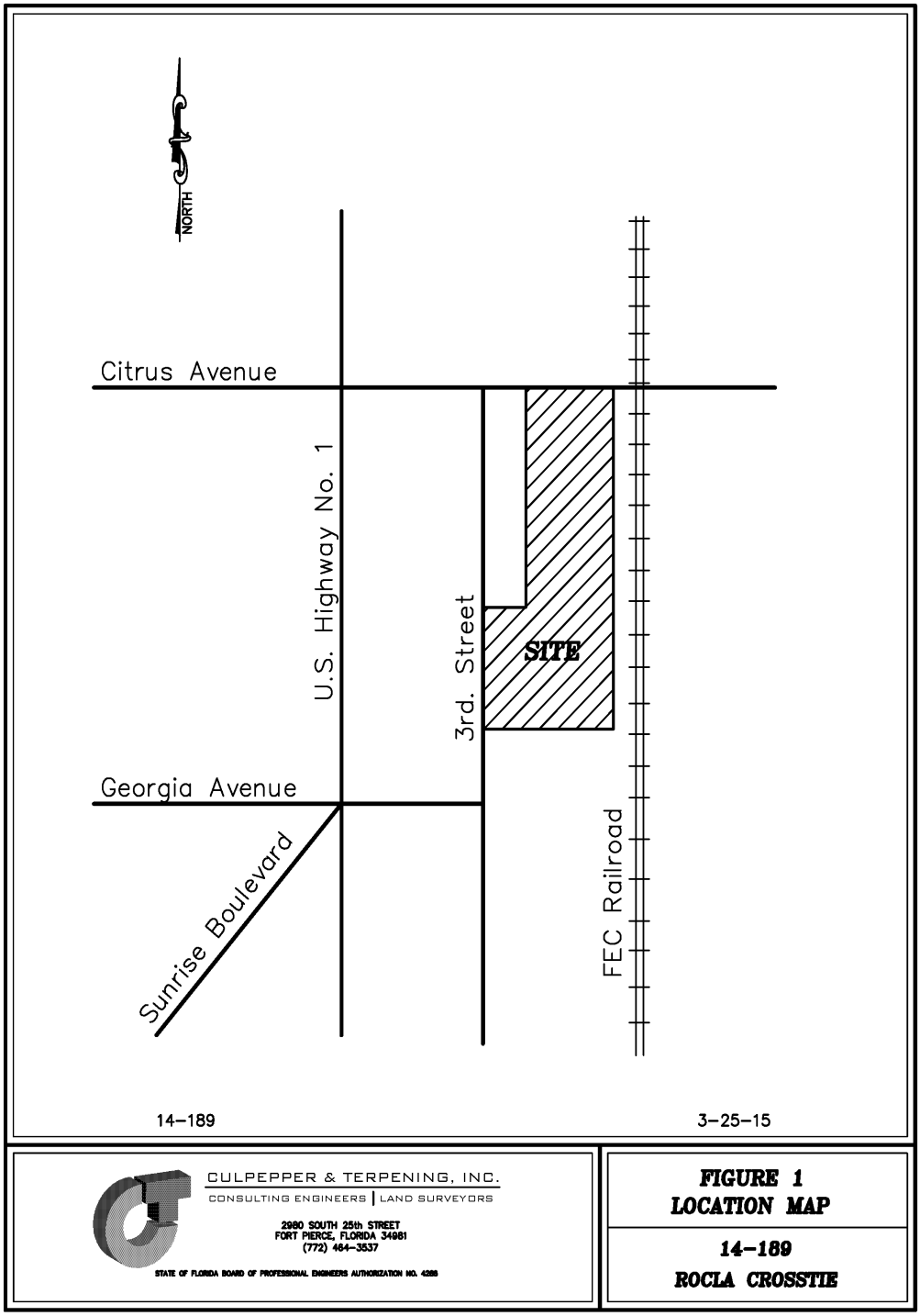
PROJECT DESCRIPTION

The proposed project, Rocla Crosstie Facility, is located on the east side of South 3rd Street, south of the Citrus Avenue overpass, in the eastern section of the City of Ft. Pierce, Florida (See Figure No. 1, Location Map).

The Rocla Crosstie Facility project will consist of a 16,850 square foot railroad crosstie manufacturing building and a separate 2,625 square foot office building. The overall property is comprised of 2 separate parcels of land that will be leased from the Florida East Coast Railroad, totaling 7.18 acres of land. The site is located in Section 10, Township 35 South, Range 40 East, St. Lucie County, Florida.

FIGURE 1
(LOCATION MAP AND STUDY AREA)



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STUDY METHODOLOGY

As the project is located within the City of Ft. Pierce, the Scope and Methodology of this report is prepared in accordance with the requirements of the City. The project is anticipated for construction in late 2015 to and therefore it was determined that the impacts of project development will be analyzed in 2020 forecast condition.

Section A – Definition of Study Area

The study area as defined by the City of Fort Pierce Chapter 22.217.*f*.2 shall be according to the Table I below:

Table I		
Size of Project	**Trips Generated**	**Study Area**
Minimal Scale	Trips 9-50	1.0 Mile Radius
Small Scale	Trips 51-100	1.5 Mile Radius
Intermediate Scale	Trips 101-500	2.0 Mile Radius
Medium Scale	Trips 501-1000	3.0 Mile Radius
Large Scale	Trips 1000-Up	5.0 Mile Radius

The Study Area includes all major roadways and intersections within the zone of influence. From the data collected in Table IV it has been determined that the Rocla Crosstie Facility is a Small Scale project. The study area shall include the following roadway segments and intersections:

Roadway Segments

- US Highway No. 1: Virginia Avenue to Orange Avenue
- Georgia Avenue: South 3rd Street to US Highway No. 1

Intersections

- US Highway No. 1 and Georgia Avenue

The following traffic study will be prepared in accordance with Chapter 22.217 of the City of Ft. Pierce Code. The analysis will be based upon the Level-of Service (LOS) standards established by the Florida Department of Transportation (FDOT) 2012 Level of Service Handbook for both the Average Daily traffic (ADT) and pm Peak Hour traffic conditions. The LOS standards found in the FDOT 2012 Level of Service Handbook are provided as Table 1 (Generalized Annual Average Daily Volumes for Florida's Urbanized Areas), and Table 2 (Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas) of this report.

Table 1

TABLE 1

Generalized **Annual Average Daily** Volumes for Florida's **Urbanized Areas**

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	16,800	17,700	**
4	Divided	*	37,900	39,800	**
6	Divided	*	58,400	59,900	**
8	Divided	*	78,800	80,100	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	7,300	14,800	15,600
4	Divided	*	14,500	32,400	33,800
6	Divided	*	23,300	50,000	50,900
8	Divided	*	32,000	67,300	68,100

Non-State Signalized Roadway Adjustments
(Alter corresponding state volumes by the indicated percent.)
Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment
Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	2,900	7,600	19,700
50-84%	2,100	6,700	19,700	>19,700
85-100%	9,300	19,700	>19,700	**

PEDESTRIAN MODE[2]
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	2,800	9,500
50-84%	*	1,600	8,700	15,800
85-100%	3,800	10,700	17,400	>19,700

BUS MODE (Scheduled Fixed Route)[3]
(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
4	47,400	64,000	77,900	84,600
6	69,900	95,200	116,600	130,600
8	92,500	126,400	154,300	176,600
10	115,100	159,700	194,500	222,700
12	162,400	216,700	256,600	268,900

Urbanized

Lanes	B	C	D	E
4	45,800	61,500	74,400	79,900
6	68,100	93,000	111,800	123,300
8	91,500	123,500	148,700	166,800
10	114,800	156,000	187,100	210,300

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 20,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	8,600	17,000	24,200	33,300
4	Divided	36,700	51,800	65,600	72,600
6	Divided	55,000	77,700	98,300	108,800

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

2012 FDOT QUALITY/LEVEL OF SERVICE HANDBOOK TABLES

Table 2

TABLE 7

Generalized **Peak Hour Directional** Volumes for Florida's **Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments
(Alter corresponding state volumes by the indicated percent.)
Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment
Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
2	2,260	3,020	3,660	3,940
3	3,360	4,580	5,500	6,080
4	4,500	6,080	7,320	8,220
5	5,660	7,680	9,220	10,360
6	7,900	10,320	12,060	12,500

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	420	840	1,190	1,640
2	Divided	1,810	2,560	3,240	3,590
3	Divided	2,720	3,840	4,860	5,380

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

2012 FDOT QUALITY/LEVEL OF SERVICE HANDBOOK TABLES

Section B
Inventory of Existing Facilities

The project traffic analysis is based upon the current condition of the surrounding roadway network that is anticipated to be impacted by the project. An inventory of the existing surrounding roadway network is provided as follows:

Roadways:

US Highway No. 1

US Highway No. 1 within the defined study area currently consists of a 4-lane divided roadway section containing two (2) 12' lanes northbound, two (2) 12' lanes southbound and left turn bays at all major intersections. The existing right-of-way of US Highway No. 1 is 70' to 80' in width.

US Highway No. 1 within the study area is classified as a State Two-Way Class II – Interrupted Flow Arterial and under the jurisdiction of the Florida Department of Transportation (FDOT).

South 3rd Street

The South 3rd Street Corridor consists of a 2-lane undivided roadway section containing 11' wide lanes in both the northbound and southbound direction. The existing right-of-way of South 3rd Street is 40' in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Georgia Avenue

Georgia Avenue within the study area is a 2-lane undivided rural roadway east of US Highway 1 and a 2-lane undivided urban roadway west of US Highway containing 11' wide travel lanes in both the easy and west bound direction. The existing right-of-way for this portion of Georgia Avenue is approximately 60 feet in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Sunrise Boulevard

Sunrise Boulevard within the study area is a 2-lane divided urban roadway that terminates at US Highway 1 at the intersection with Georgia Avenue. The roadway contains 11' wide travel lanes in both the east and west bound direction and includes parallel parking along the outside of each travel lane. The existing right-of-way for this portion of Sunrise Boulevard is approximately 80 feet in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Intersections:

US Highway No. 1 and Georgia Avenue/Sunrise Boulevard

The intersection of US Highway No. 1 and Georgia Avenue/Sunrise Boulevard is signalized. The intersection geometry is as follows:

Eastbound	*2*	*Lane*	*Lt/Thru*	*Westbound*	*1*	*Lane*	*Left/Thru/Rt*
	1	*Lane*	*Right*				
Southbound	*1*	*Lane*	*Left*	*Northbound*	*1*	*Lane*	*Left*
	1	*Lane*	*Thru*		*1*	*Lane*	*Thru*
	1	*Lane*	*Thru/Rt*		*1*	*Lane*	*Thru/Rt*

Existing Traffic Conditions

The Peak Season Average Daily Traffic Volume for the roadway of the project area were obtained from the Fall 2014, St. Lucie Transportation Planning Organization Counts, and augmented by Culpepper & Terpening, Inc. with traffic counts taken during the week of March 23, 2015. These counts include the committed trips as provided in the TPO data sheets and are provided in Table 3 – Existing Traffic Conditions.

Table 3
Existing Traffic Conditions

Roadway		Classification Type	Lanes	LOS D Capacity	ADT	Committed Trips	Total /LOS	
South 3rd Street								
N. of Georgia Ave		Local	2 ln	13,320	270	0	270	B
Georgia Avenue								
West of US 1		Mc/Mc	2 ln	13,320	1,964	0	1,964	B
East of US 1		Local	2 ln	13,320	540	0	540	B
US 1 North								
North of Georgia Ave		CII	4 ln	30,780	27,870	0	27,870	C
South of Georgia Ave		CII	4 ln	30,780	24,720	0	24,720	C

The PM Peak Hour Directional Volume for the roadways located within the study area were obtained from the Fall 2014, St. Lucie Transportation Planning Organization Counts, and augmented by Culpepper & Terpening, Inc. with traffic counts taken during the week of March 23, 2015. These counts include the committed trips as provided in the TPO data sheets and are provided in Table 4 – Existing Roadway Link LOS.

Table 4
Existing Roadway Link LOS

Roadway	Classification Type	Lanes	ADT/ LOS Capacity	ADT Committed/LOS		PM Peak Hr/LOS Capacity	PM PK Hr Directional Volumes/LOS	
South 3rd Street								
N. of Georgia Ave	Local	2 ln	13,320	270	B	675	17	B
Georgia Avenue								
West of US 1	Mc/Mc	2 ln	13,320	1,964	B	675	123	C
East of US 1	Local	2 ln	13,320	540	B	675	34	B
US 1 North								
North of Georgia Ave	Cl-II	4 ln	30,780	27,870	C	1,548	1,218	D
South of Georgia Ave	Cl-II	4 ln	30,780	24,720	C	1,548	1,352	D

TRIP GENERATION

The proposed crosstie manufacturing facility will consist of a 16,850 square foot manufacturing building and a 2,625 square foot office building. The facility is a specialized operation that will provide rail crosstie production in two eight hour work shifts. The work shifts will be from 7 AM to 3 PM and 7 PM to 3 AM. Administration staff will work from 7 AM to 4 PM.

Trip Generation for the proposed crosstie manufacturing facility will be estimated on the number of employees and deliveries that are anticipated for the facility. The Average Daily Traffic (ADT) is based upon the following:

Administrative Staff:	4 Employees @ 2.5 trips/employee
Early Shift:	20 Employees @ 2.5 trips/employee
Late Shift:	18 Employees @ 2 trips/employee
Deliveries:	14 deliveries/day

The total average daily traffic is calculated as follows:

ADT = (4 employees x 2.5) + (20 employees x 2.5) + (18 employees x 2) + (14 deliveries x 2) = 112 trips per day

The peak hour of operation traffic will be the combined administrative staff and early shift employee start of work which will be a total of 24 Vehicles Per Hour (VPH) between 6:00 AM and 7:00 AM.

It should be noted that due to the nature of the facilities operations, and timing of the shift work, there will be negligible trips during the AM and PM peak hours of traffic on the roadway network.

TRIP DISTRIBUTION

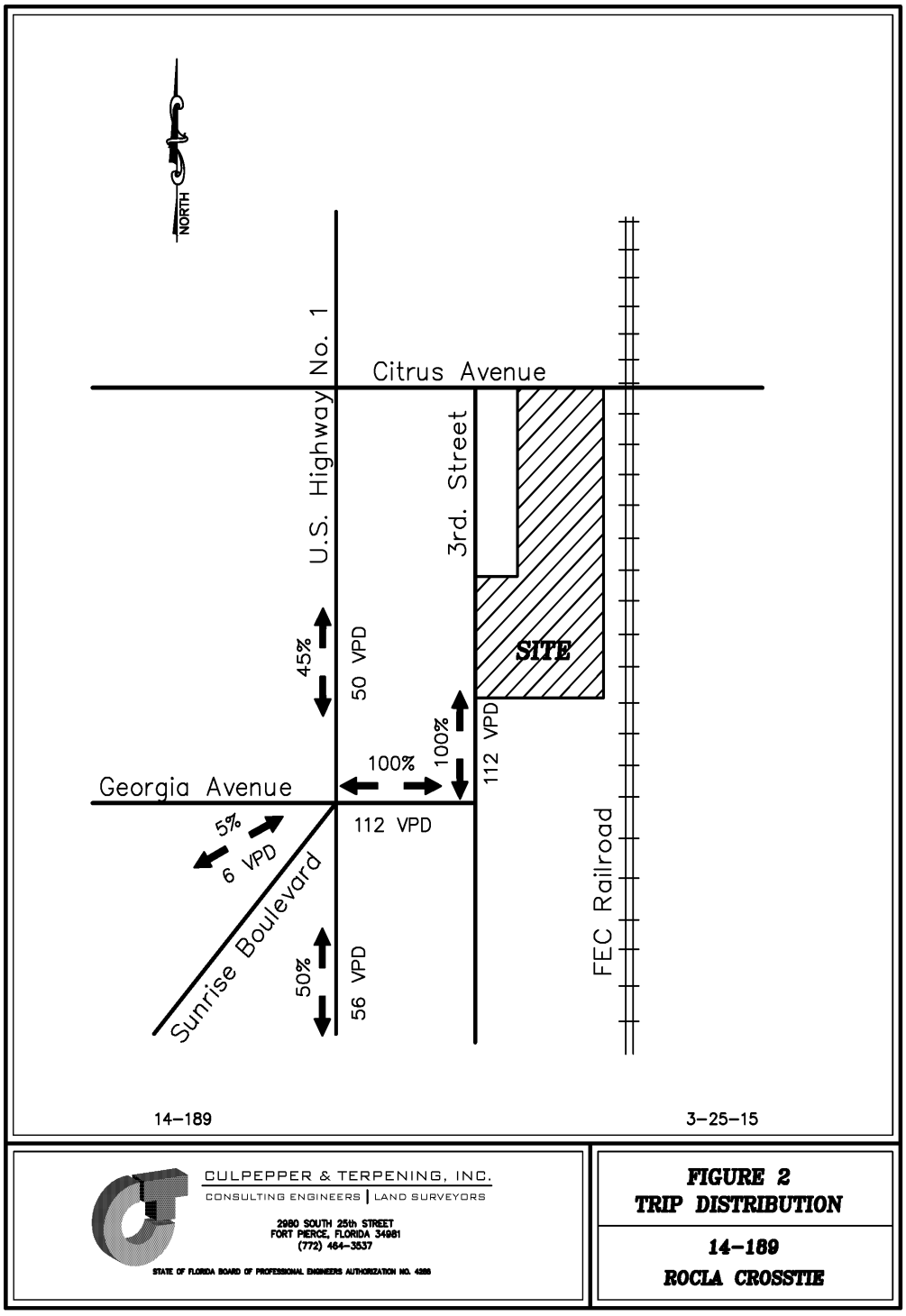
The Trip Distribution from the site onto local streets was derived based upon the surrounding developments as well as the existing Transportation Network. The Distribution onto the surrounding links was then derived and is portrayed as Figure No. 2. A summary of the Major Trip Assignments were estimated as follows:

Table 5
Trip Distribution

Link	%	ADT	PM Peak / Hr. Dir.
South 3rd Street			
North of Georgia	100%	112 vpd	0 vph
Georgia Avenue			
East of US 1	100%	112 vpd	0 vph
West of US 1	5%	6 vpd	0 vph
US 1 North			
North of Georgia	45%	50 vpd	0 vph
South of Georgia	50%	56 vpd	0 vph

A complete trip assignment by percentage is shown on Figure No. 2.

Figure 2 – Trip Distribution



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CAPACITY ANALYSIS

Roadway Link Analysis:

The Trip Assignment Volumes calculated in the previous sections were added to the existing volumes and background trips assigned to the roadway links within the study area. Project trip distribution onto the surrounding links was then derived and is portrayed as Figure No. 2. The existing traffic volumes provided in the fall St. Lucie County TPO Traffic Counts were increased by .5% per year from 2015 to account for growth through the 2020 forecasting year. The .5% growth factor was determined by utilizing the St. Lucie County TPO count data for the past 3 years to calculate the actual growth experienced within the transportation service area.

Level of Service, Table 1, of the Florida FDOT 2012 Quality / Level of Service Handbook was used for both the existing (Pre-Development, including background) and Post-Development Levels of Service. Table 6, Roadway Link Analysis (ADT) provides a summary of the results of the project's impact on the roadway network.

Table 6
Roadway Link Analysis (ADT)

Roadway	LOS Capacity	Existing Conditions		Growth (2020)*.5%	Pre-Development Conditions		Project Traffic	Post-Development Conditions	
South 3rd Street									
North of Georgia	13,320	270	B	7	277	B	112	389	B
Georgia Avenue									
West of US 1	13,320	1,964	B	50	2,014	B	6	7,909	B
East of US 1	13,320	540	B	14	554	B	112	666	B
US 1 North									
North of Georgia	30,780	27,870	C	704	28,774	C	50	28,824	C
South of Georgia	30,780	24,720	C	624	25,344	C	56	25,400	C

Table 7 (Impact on Local Roadway Network (ADT)) and Table 8 (Local Roadway Network & Impact (PM Peak Hour Directional) provide for the actual impact anticipated from the development of the project through the 2020 horizon year for both the ADT and PM peak Hour conditions.

[go to next page]

Table 7 Impact on Local Roadway Network (ADT)							
		DT LOS Capacity	Project Traffic	ADT Post-Development Conditions		ADT % Impact	Remaining Capacity
South 3rd Street							
North of Georgia		13,320	112	389	B	0.003%	12,931
Georgia Avenue							
West of US 1		13,320	6	7,909	B	0.004%	5,411
East of US 1		13,320	112	666	B	0.005%	12,654
US 1 North							
North of Georgia		30,780	50	28,824	C	0.002%	1,956
South of Georgia		30,780	56	25,400	C	0.002%	5,380

****

Table 8 Roadway Network & Impact (PM Peak Hour Directional)									
Roadway		PM Peak/ LOS D Capacity	PM Peak Pre-Development 2020		Project Traffic	PM Peak Post-Development Conditions		% Impact	Remaining Capacity
South 3rd Street									
N. of Georgia Ave		675	17	B	0	17	B	0.0%	658
Georgia Avenue									
West of US 1		675	126	B	0	126	B	0.0%	549
East of US 1		675	34	B	0	34	B	0.0%	641
US 1 North									
North of Georgia Ave		1,548	1,248	C	0	1,248	C	0.0%	300
South of Georgia Ave		1,548	1,386	C	0	1,386	C	0.0%	162

As demonstrated by the Tables 6, 7 and 8; the project will not have an impact on the existing roadway network in either the Average Daily or PM Peak Hour traffic conditions. The roadways are expected to operate at acceptable levels of service through the 2020 horizon year.

Intersection Analysis

In order to determine the project's impact is on the intersecting roadways, analysis has been conducted during the time periods that experience the most traffic volumes within any hour of the weekday. The AM and PM Peak Hour Traffic conditions typically experience the highest traffic volumes during the weekday. The existing Peak Hour Volumes at the intersection of US Highway No. 1 and Georgia Ave/Sunrise Boulevard were taken by Culpepper & Terpening, Inc. on March 26, 2015 during both the AM and PM peak hour time periods.

The traffic counts determined that the peak hour conditions at the intersection are as follows:

AM Peak Hour: 7:45 am to 8:45 am
PM Peak Hour: 4:45 pm to 5:45 pm

The individual turning movement counts for both the AM and PM peak hours were then grown to the 2020 analysis year by the .5% growth factor established consistent with the Average Daily Traffic.

Project traffic, as mentioned in the trip generation section of this report, will be negligible on the roadway network due to the timing of the proposed shift work. Intersection analysis is however provided in this report to show the current (2015), and horizon analysis (2020) years performance of the closest intersection to the project, US Highway No. 1 and Georgia Ave/Sunrise Boulevard.

The Pre-Development and Post-Development AM and PM Peak Hour turning movements for the project intersections are depicted in Figures 3 and 4 for both the current 2015 and future 2020 conditions.

[go to next page]

Figure 3 – AM Peak Hour Turning Movements

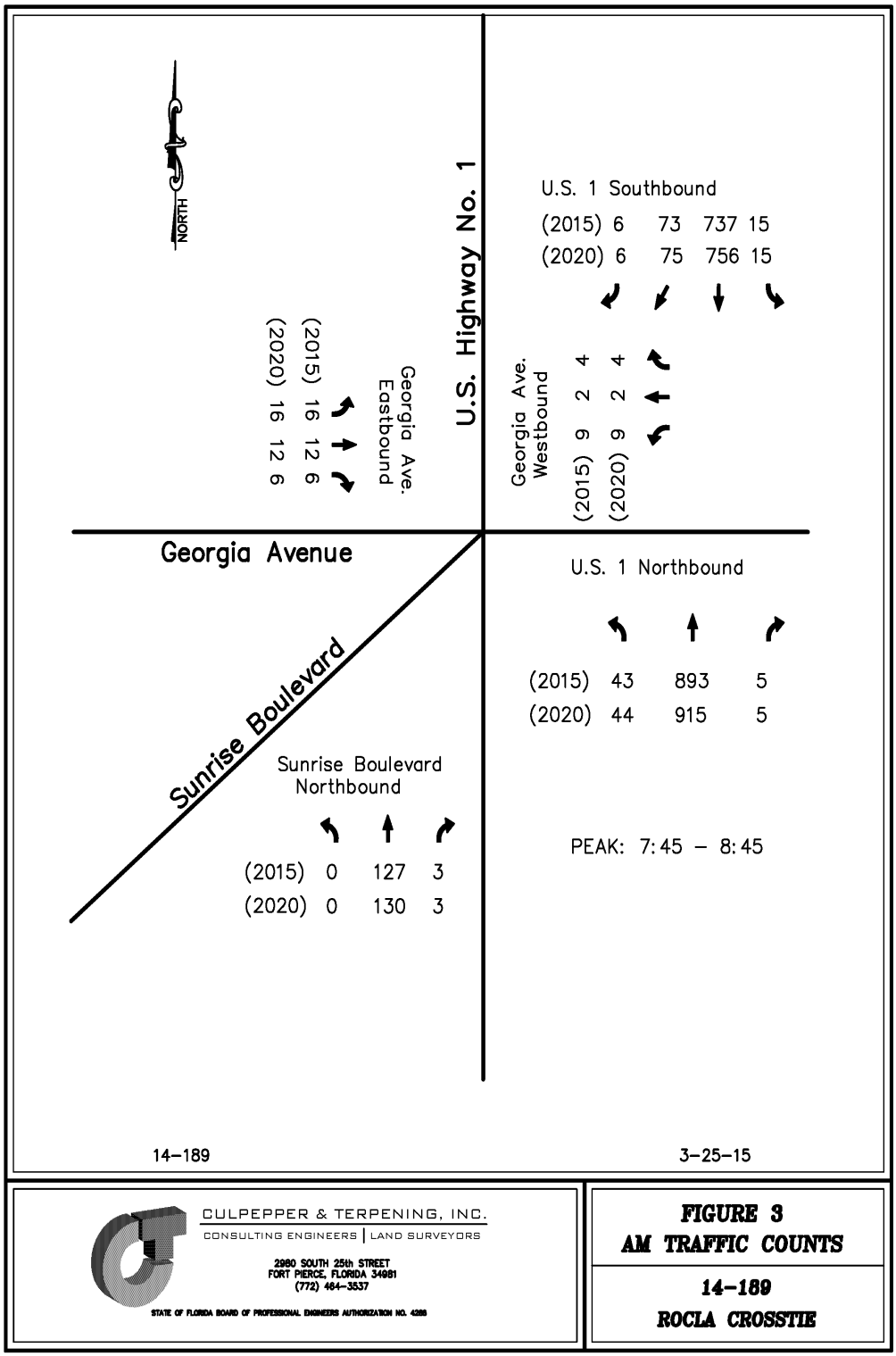

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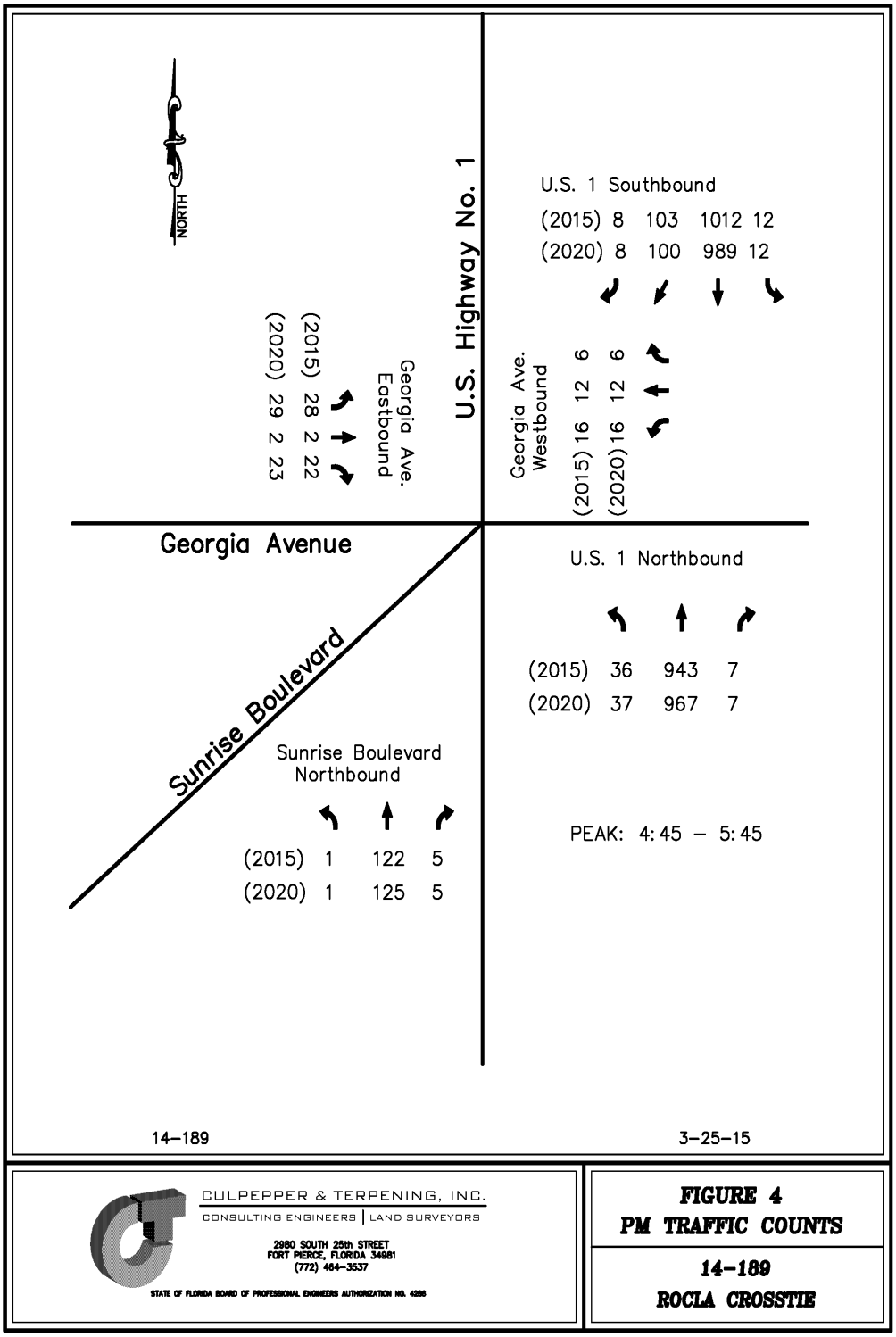
Figure 4 – PM Peak Hour Turning Movements



Underline is for Addition from prior submission
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The following is a summary of the results of the Levels of Service for each approach and the overall intersection. A detailed analysis of each lane group in a graphical representation of the lane geometry for the each of the studied intersections can be found in the attached Appendix A and C for the Pre-Development conditions and well as the Post-Development Conditions. A summary of the intersection capacity is a follows:

US Highway No. 1 and Georgia Ave/Sunrise Boulevard A.M. Peak Hour (2015)		
Approach	**Pre-Development**	**Post-Development**
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

US Highway No. 1 and Georgia Ave/Sunrise Boulevard P.M. Peak Hour (2015)		
Approach	**Pre-Development**	**Post-Development**
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

US Highway No. 1 and Georgia Ave/Sunrise Boulevard A.M. Peak Hour (2020)		
Approach	**Pre-Development**	**Post-Development**
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

US Highway No. 1 and Georgia Ave/Sunrise Boulevard P.M. Peak Hour (2020)		
Approach	**Pre-Development**	**Post-Development**
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

****

CONCLUSION

The traffic impact of the proposed Rocla Crosstie Manufacturing facility project have been analyzed in both the current and future 2020 horizon year condition for the annual daily traffic as well as the AM and PM peak hour condition in accordance with the requirements of the City of Ft. Pierce City Code Chapter 22.217. The results of the analysis is that the development of the facility will have no effect on the levels of service within the project impact area, and the local roadway network will continue to maintain an acceptable level of service and function properly after the development of the project. The results of the analysis are as follows:

- The Rocla Crosstie facility will have a minimal impact of the Annual Daily traffic condition on the surrounding roadway network and result in no change in Level of Service performance as demonstrated in Table 6 “Roadway Link Analysis (ADT)” found on page 12 of this report.

- The Rocla Crosstie facility will have no impact on the AM or PM peak hour of traffic condition on the surrounding roadway network and result in no change in Level of Service performance as demonstrated in Table 8 “Roadway Network & Impact (PM Peak Hour Directional)” found on page 13 of this report.

- The Rocla Crosstie facility will have no impact on the peak hour of traffic at the surrounding intersections as demonstrated by the Intersection Capacity analysis as provided on page 17 of this report.

- The development of the Rocla Crosstie facility will not result in any roadway links or intersections within the area of study to fall below acceptable levels of service through the 2020 horizon year, thus no transportation capacity related improvements are required.

Submitted By

Stefan K. Matthes
Florida Registration No. 38723

References

1. State of Florida Department of Transportation, Quality/Level of Service Handbook, 2012.

2. Transportation Engineers, Trip Generation, Ninth Edition, 2012.

3. St. Lucie Urban Area Transportation Planning Organization Traffic Counts, Fall 2012, 2013 & 2014.

4. HCS + Highway Capacity Software.

Appendix A
Capacity Analysis Peak Hour (2015)

Short Report

SHORT REPORT

General Information		Site Information	
Analyst	*skm*	Intersection	*US 1 & Georgia Ave*
Agency or Co.	*City of Ft. Pierce*	Area Type	*CBD or Similar*
Date Performed	*3/29/2015*	Jurisdiction	*FDOT/CFP*
Time Period	*AM peak (7:45 - 8:45)*	Analysis Year	*2015*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	143	15	6	9	2	4	43	893	5	15	737	79
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.73	0.54	0.50	0.56	0.50	0.50	0.77	0.90	0.63	0.63	0.87	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08
Timing	G = 20.0	G = 10.0	G =	G =	G = 6.0	G = 56.5	G =	G =
	Y = 8	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =

Duration of Analysis (hrs) = 1.00 — Cycle Length C = 112.5

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	196	40			28		56	1000		24	967	
Lane Group Capacity	275	276			135		248	1555		238	1528	
v/c Ratio	0.71	0.14			0.21		0.23	0.64		0.10	0.63	
Green Ratio	0.18	0.18			0.09		0.59	0.50		0.59	0.50	
Uniform Delay d_1	43.5	39.0			47.6		12.2	20.6		12.0	20.4	
Delay Factor k	0.28	0.11			0.11		0.11	0.22		0.11	0.21	
Incremental Delay d_2	8.8	0.2			0.8		0.5	0.9		0.2	0.9	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	52.4	39.3			48.3		12.7	21.5		12.2	21.3	
Lane Group LOS	D	D			D		B	C		B	C	
Approach Delay	50.1			48.3			21.0			21.1		
Approach LOS	D			D			C			C		
Intersection Delay	24.4			Intersection LOS						C		

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Short Report Page 1 of 1

SHORT REPORT

General Information		Site Information	
Analyst	*skm*	Intersection	*US 1 & Georgia Ave*
Agency or Co.	*City of Ft. Pierce*	Area Type	*CBD or Similar*
Date Performed	*3/29/2015*	Jurisdiction	*FDOT/CFP*
Time Period	*PM peak (4:45 - 5:45)*	Analysis Year	*2015*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	150	7	22	16	12	6	36	943	7	12	987	108
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.83	0.88	0.61	0.80	0.50	0.75	0.53	0.95	0.58	0.75	0.95	0.93
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08
Timing	G = 18.0	G = 8.0	G =	G =	G = 8.0	G = 55.0	G =	G =
	Y = 8	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 1.00						Cycle Length C = 109.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	181	44			52		68	1005		16	1155	
Lane Group Capacity	255	236			115		230	1562		270	1541	
v/c Ratio	0.71	0.19			0.45		0.30	0.64		0.06	0.75	
Green Ratio	0.17	0.17			0.07		0.61	0.50		0.61	0.50	
Uniform Delay d_1	43.0	39.2			48.4		12.6	19.8		10.6	21.5	
Delay Factor k	0.27	0.11			0.11		0.11	0.22		0.11	0.30	
Incremental Delay d_2	9.3	0.4			2.8		0.7	0.9		0.1	2.1	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	52.3	39.6			51.2		13.3	20.7		10.7	23.6	
Lane Group LOS	D	D			D		B	C		B	C	
Approach Delay	49.8			51.2			20.3			23.5		
Approach LOS	D			D			C			C		
Intersection Delay	25.0			Intersection LOS						C		

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Appendix B
Capacity Analysis Peak Hour (2020)

Short Report — Page 1 of 1

SHORT REPORT

General Information		Site Information	
Analyst	*skm*	Intersection	*US 1 & Georgia Ave*
Agency or Co.	*City of Ft. Pierce*	Area Type	*CBD or Similar*
Date Performed	*3/29/2015*	Jurisdiction	*FDOT/CFP*
Time Period	*AM peak (7:45 - 8:45)*	Analysis Year	*2020*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	146	15	6	9	2	4	44	915	5	15	756	81
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.73	0.54	0.50	0.56	0.50	0.50	0.77	0.90	0.63	0.63	0.87	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08
Timing	G = 20.0	G = 10.0	G =	G =	G = 6.0	G = 56.5	G =	G =
	Y = 8	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =

Duration of Analysis (hrs) = 1.00 — Cycle Length C = 112.5

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	200	40			28		57	1025		24	992	
Lane Group Capacity	275	276			135		241	1555		231	1528	
v/c Ratio	0.73	0.14			0.21		0.24	0.66		0.10	0.65	
Green Ratio	0.18	0.18			0.09		0.59	0.50		0.59	0.50	
Uniform Delay d_1	43.7	39.0			47.6		12.4	20.8		12.2	20.7	
Delay Factor k	0.29	0.11			0.11		0.11	0.23		0.11	0.23	
Incremental Delay d_2	9.8	0.2			0.8		0.5	1.0		0.2	1.0	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	53.5	39.3			48.3		12.9	21.9		12.4	21.7	
Lane Group LOS	D	D			D		B	C		B	C	
Approach Delay	51.1			48.3			21.4			21.4		
Approach LOS	D			D			C			C		
Intersection Delay	24.8			Intersection LOS						C		

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Short Report Page 1 of 1

SHORT REPORT

General Information		Site Information	
Analyst	*skm*	Intersection	*US 1 & Georgia Ave*
Agency or Co.	*City of Ft. Pierce*	Area Type	*CBD or Similar*
Date Performed	*3/29/2015*	Jurisdiction	*FDOT/CFP*
Time Period	*PM peak (4:45 - 5:45)*	Analysis Year	*2020*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	154	7	23	16	12	6	37	967	7	12	1012	111
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.83	0.88	0.61	0.80	0.50	0.75	0.53	0.95	0.58	0.75	0.95	0.93
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08
Timing	G = 18.0	G = 8.0	G =	G =	G = 8.0	G = 55.0	G =	G =
	Y = 8	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =

Duration of Analysis (hrs) = 1.00 — Cycle Length C = 109.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	186	46			52		70	1030		16	1184	
Lane Group Capacity	255	236			115		223	1562		263	1541	
v/c Ratio	0.73	0.19			0.45		0.31	0.66		0.06	0.77	
Green Ratio	0.17	0.17			0.07		0.61	0.50		0.61	0.50	
Uniform Delay d_1	43.2	39.2			48.4		13.0	20.0		10.7	21.8	
Delay Factor k	0.29	0.11			0.11		0.11	0.23		0.11	0.32	
Incremental Delay d_2	10.8	0.4			2.8		0.8	1.0		0.1	2.5	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	53.9	39.7			51.2		13.8	21.1		10.8	24.3	
Lane Group LOS	D	D			D		B	C		B	C	
Approach Delay	51.1			51.2			20.6			24.1		
Approach LOS	D			D			C			C		
Intersection Delay	25.6			Intersection LOS						C		

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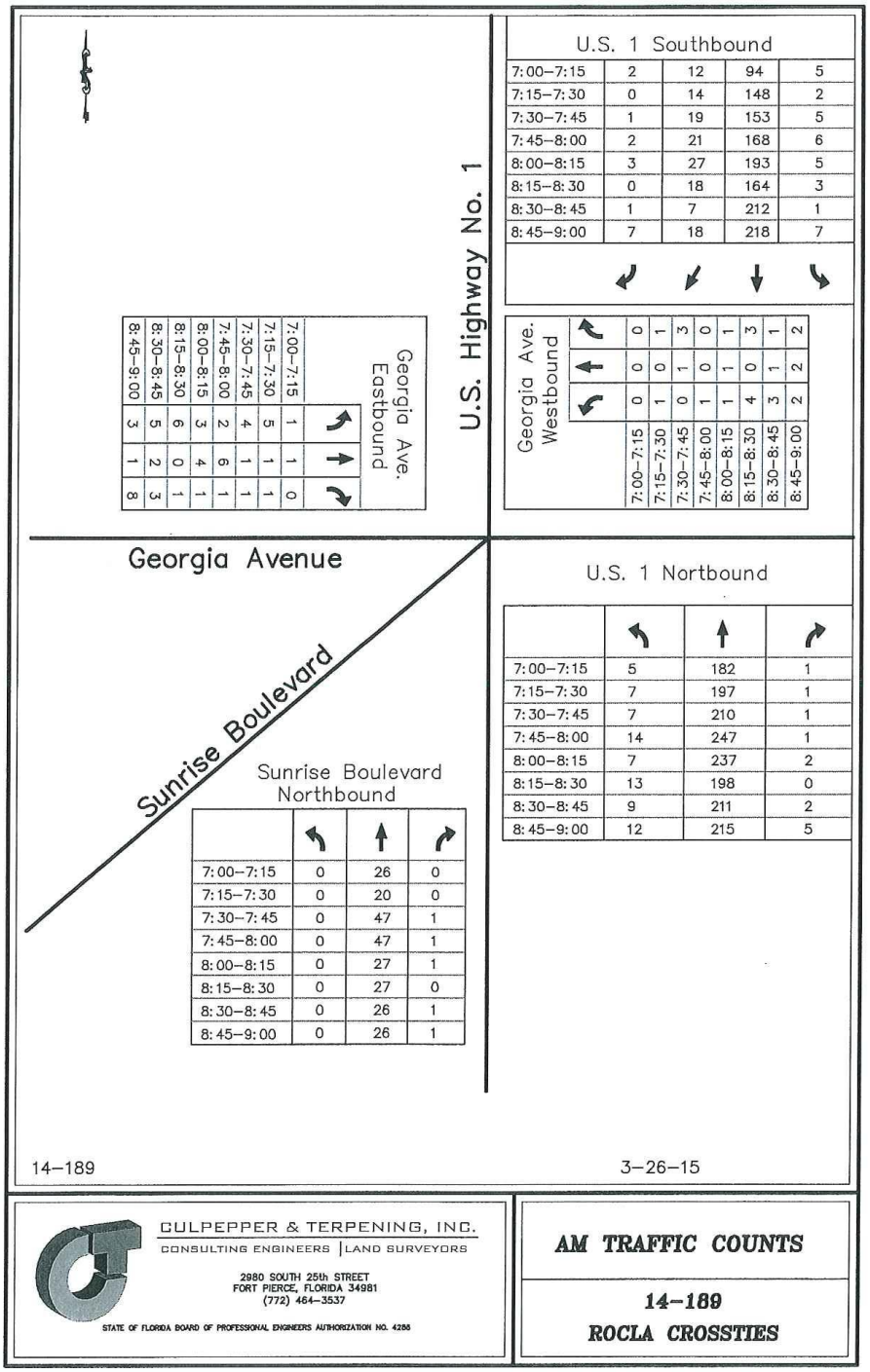
Appendix C
Traffic Data



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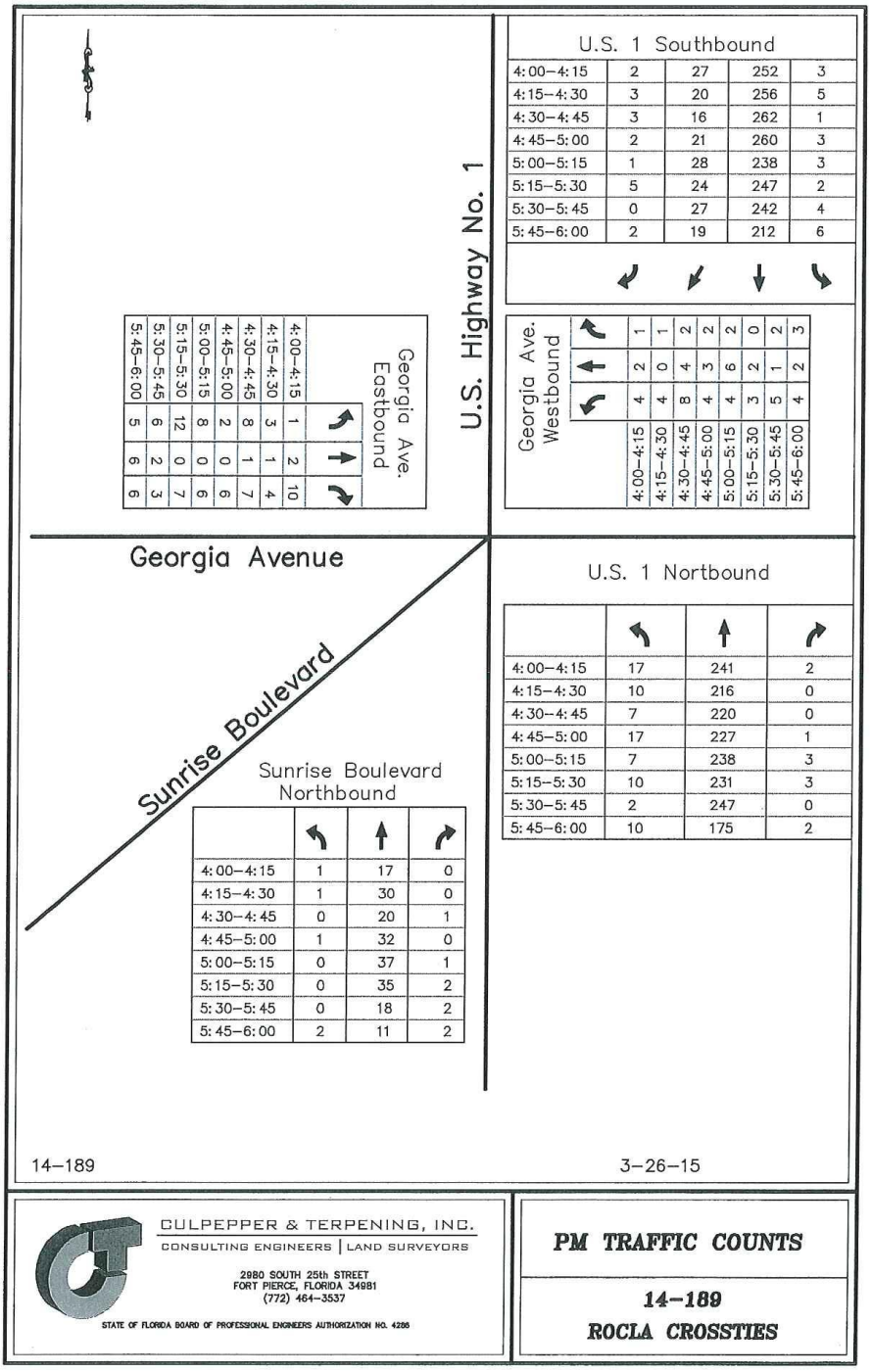

U.S. 1 Southbound

4:00–4:15	2	27	252	3
4:15–4:30	3	20	256	5
4:30–4:45	3	16	262	1
4:45–5:00	2	21	260	3
5:00–5:15	1	28	238	3
5:15–5:30	5	24	247	2
5:30–5:45	0	27	242	4
5:45–6:00	2	19	212	6

Georgia Ave. Eastbound

4:00–4:15	1	2	10
4:15–4:30	3	1	4
4:30–4:45	8	1	7
4:45–5:00	2	0	6
5:00–5:15	8	0	6
5:15–5:30	12	0	7
5:30–5:45	6	2	3
5:45–6:00	5	6	6

Georgia Ave. Westbound

4:00–4:15	4	2	1	1	2	2	0	2	3
4:15–4:30	4	0	4	3	6	2	1	2	
4:30–4:45	8	4	4	4	2	2	2		
4:45–5:00	4	3	2	2	2	1			
5:00–5:15	4	6	2	2	1				
5:15–5:30	3	2	2	1					
5:30–5:45	5	1	2						
5:45–6:00	4	2							

U.S. 1 Northbound

4:00–4:15	17	241	2
4:15–4:30	10	216	0
4:30–4:45	7	220	0
4:45–5:00	17	227	1
5:00–5:15	7	238	3
5:15–5:30	10	231	3
5:30–5:45	2	247	0
5:45–6:00	10	175	2

Sunrise Boulevard Northbound

4:00–4:15	1	17	0
4:15–4:30	1	30	0
4:30–4:45	0	20	1
4:45–5:00	1	32	0
5:00–5:15	0	37	1
5:15–5:30	0	35	2
5:30–5:45	0	18	2
5:45–6:00	2	11	2

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS
2980 SOUTH 25th STREET
FORT PIERCE, FLORIDA 34981
(772) 464–3537
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

PM TRAFFIC COUNTS

14–189
ROCLA CROSSTIES

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St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
Fall 2013

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
EDWARDS RD	SELVITZ RD to 25TH ST	11,925	790	643	C	0.869	606	C	0.819
EDWARDS RD	25TH ST to SUNRISE BLVD	16,738	1,590	885	C	0.738	868	C	0.723
EDWARDS RD	SUNRISE BLVD to OLEANDER AVE	12,500	1,760	613	B	0.438	598	B	0.427
EDWARDS RD	OLEANDER AVE to US 1	8,500	1,590	431	C	0.359	442	C	0.368
EMERSON AVE	INDRIO RD to RUSSOS ROAD	5,113	1,140	413	C	0.516	377	B	0.943
EMERSON AVE	RUSSOS ROAD to INDIAN RIVER COUNTY LINE	5,113	800	413	C	0.516	377	B	0.943
FARMER'S MARKET R	OLEANDER AVE to US 1	1,979	570	115	B	0.348	118	B	0.358
FLORESTA DR/SOUTHBEND BL...	BECKER RD to FLORESTA DR	10,220	830	674	C	0.875	558	C	0.725
FLORESTA DR	OAK RIDGE DR to PORT ST LUCIE BLVD	12,405	830	954	F	1.149	680	C	0.883
FLORESTA DR	THORNHILL DR to CROSSTOWN PKWY	16,500	790	1,231	F	1.558	1,012	F	1.281
FLORESTA DR	PORT ST LUCIE BLVD to THORNHILL DR	16,500	790	1,231	F	1.558	1,012	F	1.281
FLORESTA DR	CROSSTOWN PKWY to PRIMA VISTA BLVD	13,758	830	1,037	F	1.249	783	D	0.943
FLORESTA DR	PRIMA VISTA BLVD to AIROSO BLVD	11,539	830	670	C	0.870	736	C	0.956
FLORESTA DR	BAYSHORE BLVD to SELVITZ RD	3,800	630	327	B	0.884	281	B	0.759
FLORESTA DR	SELVITZ RD to AIROSO BLVD	3,800	790	327	B	0.711	281	B	0.611
FT PIERCE BLVD	EMERSON AVE to INDRIO RD	3,019	630	223	B	0.603	195	B	0.527
GARDENIA AVE	OLEANDER AVE to US 1	2,400	530	166	C	0.461	142	C	0.394
GATLIN BLVD	W OF INTERSTATE 95 to E OF INTERSTATE 95	32,500	2,530	2,446	D	0.967	1,993	D	0.788
GATLIN BLVD	E OF INTERSTATE 95 to SAVAGE BLVD	32,500	2,530	2,446	D	0.967	1,993	D	0.788
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	32,500	2,530	2,446	D	0.967	1,993	D	0.788
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	32,500	2,780	2,446	C	0.906	1,993	B	0.878
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	32,500	2,780	2,446	C	0.906	1,993	B	0.878
GEORGIA AVE	25TH ST to OKEECHOBEE RD	4,000	420	221	C	0.762	219	C	0.755
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	4,000	790	221	B	0.480	219	B	0.476
GEORGIA AVE	17TH ST to 13TH ST	4,400	580	260	C	0.650	245	C	0.613
GEORGIA AVE	13TH ST to 7TH ST	1,864	580	109	C	0.273	121	C	0.303
GEORGIA AVE	7TH ST to US 1	1,960	450	118	C	0.621	123	C	0.647
GILSON RD	MARTIN COUNTY LINE to BECKER RD	10,992	830	904	F	1.089	916	F	1.104
GILSON RD	BECKER RD to LAKERIDGE DR	10,992	630	904	F	1.435	916	F	1.454

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				Volume	LOS	V/C	Volume	LOS	V/C
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GEORGIA AVE	25TH ST to OKEECHOBEE RD	4,167	510	230	C	0.920	228	C	0.912
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	4,167	640	230	C	0.719	228	C	0.713
GEORGIA AVE	17TH ST to 13TH ST	4,350	510	257	D	0.504	242	C	0.968
GEORGIA AVE	13TH ST to 7TH ST	1,825	510	106	C	0.424	119	C	0.476
GEORGIA AVE	7TH ST to US 1	1,964	510	119	C	0.476	123	C	0.492
GILSON RD	MARTIN C.L. to BECKER RD	9,200	640	833	F	1.225	849	F	1.249
GILSON RD	BECKER RD to LAKERIDGE DR	9,200	510	833	F	1.543	849	F	1.572
GLADES CUT-OFF RD	RANGE LINE RD to RESERVE BLVD	2,100	800	176	B	0.629	195	B	0.696
GLADES CUT-OFF RD	RESERVE BLVD to COMMERCE CENTER DR	2,768	1,020	375	C	0.521	325	B	0.903
GLADES CUT-OFF RD	CARLTON RD to RANGE LINE RD	2,100	290	176	C	0.607	195	C	0.672
GLADES CUT-OFF RD	COMMERCE CENTER DR to MIDWAY RD	2,290	830	174	C	0.223	159	C	0.204
GLADES CUT-OFF RD	MIDWAY RD to JENKINS RD	6,652	710	445	D	0.627	397	D	0.559
GLADES CUT-OFF RD	JENKINS RD to SELVITZ RD	4,913	830	301	C	0.386	272	C	0.349
GRAHAM RD	KINGS HWY to JENKINS RD	3,500	590	241	C	0.430	210	C	0.375
GREEN RIVER PKWY	MARTIN C.L. to CHARLESTON DR	3,635	800	253	B	0.904	231	B	0.825
GREEN RIVER PKWY	CHARLESTON DR to MELALEUCA BLVD	3,635	800	253	B	0.904	231	B	0.825
GREEN RIVER PKWY	MELALEUCA BLVD to WALTON RD	3,635	800	253	B	0.904	231	B	0.825
HARTMAN RD	OKEECHOBEE RD to PETERSON RD	5,900	640	433	D	0.677	374	D	0.584
HARTMAN RD	PETERSON RD to DELAWARE AVE	5,900	510	433	D	0.849	374	D	0.733
HARTMAN RD	DELAWARE AVE to ORANGE AVE	5,900	710	433	D	0.610	374	D	0.527
HEADER CANAL RD	OKEECHOBEE RD to ORANGE AVE	450	500	32	B	0.200	30	B	0.188
HILLMOOR DR	US 1 to LENNARD RD	3,350	710	213	C	0.609	250	C	0.714
I-95	GATLIN BLVD to ST LUCIE WEST BLVD	72,983	4,580	3,737	C	0.816	3,376	C	0.737
I-95	ST LUCIE WEST BLVD to MIDWAY RD	54,912	4,580	3,088	B	0.919	2,663	B	0.793
I-95	MIDWAY RD to OKEECHOBEE RD	65,849	4,580	3,975	C	0.868	3,227	B	0.960
I-95	OKEECHOBEE RD to ORANGE AVE	45,500	7,320	1,822	B	0.405	1,894	B	0.421

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				Volume	LOS	V/C	Volume	LOS	V/C
TULIP BLVD	PAAR DR to DARWIN BLVD	3,300	550	227	C	0.597	217	C	0.571
US 1	MARTIN COUNTY LINE to LENNARD RD	48,802	3,770	2,222	C	0.748	2,613	C	0.880
US 1	LENNARD RD to PORT ST LUCIE BLVD	48,802	3,590	2,222	C	0.785	2,613	C	0.923
US 1	MARIPOSA AVE to JENNINGS RD	33,607	2,940	1,613	B	0.672	1,712	B	0.713
US 1	JENNINGS RD to TIFFANY AVE	33,607	2,940	1,613	B	0.672	1,712	B	0.713
US 1	TIFFANY AVE to WALTON RD	33,607	2,940	1,613	B	0.672	1,712	B	0.713
US 1	WALTON RD to VILLAGE GREEN DR	43,377	2,940	2,350	B	0.979	2,107	B	0.878
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	52,770	3,090	2,803	C	0.934	2,625	C	0.875
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	52,770	2,810	2,803	D	0.998	2,625	D	0.934
US 1	PRIMA VISTA BLVD to RIO MAR DR	35,436	3,090	1,639	B	0.650	1,613	B	0.640
US 1	RIO MAR DR to KITTERMAN RD	29,505	2,810	1,442	C	0.661	1,306	C	0.599
US 1	KITTERMAN RD to SAEGER AVE	29,505	2,940	1,442	B	0.601	1,306	B	0.544
US 1	SAEGER AVE to EASY ST	29,505	2,450	1,442	D	0.589	1,306	D	0.533
US 1	EASY ST to MIDWAY RD	27,709	3,090	1,292	B	0.513	1,255	B	0.498
US 1	MIDWAY RD to WEATHERBEE RD	29,941	1,860	1,407	D	0.756	1,424	D	0.766
US 1	MIDWAY RD to FARMER'S MARKET RD	29,941	1,960	1,407	B	0.902	1,424	B	0.913
US 1	FARMER'S MARKET RD to EDWARDS RD	29,941	1,960	1,407	B	0.902	1,424	B	0.913
US 1	EDWARDS RD to SAVANNAH RD	31,459	1,770	1,441	D	0.814	1,413	D	0.798
US 1	GARDENIA AVE to VIRGINIA AVE	31,459	1,770	1,441	D	0.814	1,413	D	0.798
US 1	SAVANNAH RD to GARDENIA AVE	31,459	1,500	1,441	D	0.961	1,413	D	0.942
US 1	VIRGINIA AVE to OHIO AVE	30,672	1,770	1,477	D	0.834	1,489	D	0.841
US 1	OHIO AVE to GEORGIA AVE	30,672	1,770	1,477	D	0.834	1,489	D	0.841
US 1	GEORGIA AVE to DELAWARE AVE	25,426	1,770	1,311	C	0.986	1,253	C	0.942
US 1	DELAWARE AVE to CITRUS AVE	27,451	1,500	1,391	D	0.927	1,355	D	0.903
US 1	CITRUS AVE to ORANGE AVE	22,239	1,500	1,107	D	0.738	998	D	0.665
US 1	ORANGE AVE to AVENUE A	27,451	1,500	1,391	D	0.927	1,355	D	0.903
US 1	AVENUE A to AVENUE C	27,451	1,500	1,391	D	0.927	1,355	D	0.903
US 1	AVENUE C to AVENUE D	27,451	1,500	1,391	D	0.927	1,355	D	0.903
US 1	AVENUE D to SEAWAY DR	27,451	1,500	1,391	D	0.927	1,355	D	0.903

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				Volume	LOS	V/C	Volume	LOS	V/C
EDWARDS RD	25TH ST to SUNRISE BLVD	16,436	1,680	869	C	0.517	853	C	0.508
EDWARDS RD	SUNRISE BLVD to OLEANDER AVE	15,452	1,760	770	B	0.438	812	B	0.461
EDWARDS RD	OLEANDER AVE to US 1	9,133	1,680	466	C	0.277	475	C	0.283
EMERSON AVE	INDRIO RD to RUSSOS ROAD	5,049	1,140	408	C	0.358	372	B	0.326
EMERSON AVE	RUSSOS ROAD to INDIAN RIVER COUNTY LINE	5,049	800	408	C	0.510	372	B	0.465
FARMER'S MARKET R	OLEANDER AVE to US 1	2,014	570	117	B	0.205	120	B	0.211
FLORESTA DR/SOUTHBEND BL...	BECKER RD to FLORESTA DR	9,991	830	659	C	0.794	546	C	0.658
FLORESTA DR	OAK RIDGE DR to PORT ST LUCIE BLVD	11,945	830	918	F	1.106	655	C	0.789
FLORESTA DR	THORNHILL DR to CROSSTOWN PKWY	15,771	790	1,160	F	1.468	953	F	1.206
FLORESTA DR	PORT ST LUCIE BLVD to THORNHILL DR	15,771	790	1,160	F	1.468	953	F	1.206
FLORESTA DR	CROSSTOWN PKWY to PRIMA VISTA BLVD	13,599	830	1,025	F	1.235	774	D	0.933
FLORESTA DR	PRIMA VISTA BLVD to AIROSO BLVD	11,192	830	650	C	0.783	713	C	0.859
FLORESTA DR	BAYSHORE BLVD to SELVITZ RD	3,881	630	322	B	0.511	352	B	0.559
FLORESTA DR	SELVITZ RD to AIROSO BLVD	3,881	790	322	B	0.408	352	B	0.446
FT PIERCE BLVD	EMERSON AVE to INDRIO RD	2,997	630	221	B	0.351	193	B	0.306
GARDENIA AVE	OLEANDER AVE to US 1	2,400	530	166	C	0.313	142	C	0.268
GATLIN BLVD	W OF INTERSTATE 95 to E OF INTERSTATE 95	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	E OF INTERSTATE 95 to SAVAGE BLVD	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	40,075	2,780	3,016	F	1.085	2,458	C	0.884
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	17,079	2,780	821	B	0.295	804	B	0.289
GEORGIA AVE	25TH ST to OKEECHOBEE RD	3,900	420	241	C	0.574	221	C	0.526
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	3,900	790	241	B	0.305	221	B	0.280
GEORGIA AVE	17TH ST to 13TH ST	4,450	580	263	C	0.453	248	C	0.428
GEORGIA AVE	13TH ST to 7TH ST	1,903	580	111	C	0.191	124	C	0.214
GEORGIA AVE	7TH ST to US 1	1,955	450	118	C	0.262	123	C	0.273
GILSON RD	MARTIN COUNTY LINE to BECKER RD	10,813	830	889	F	1.071	901	F	1.086
GILSON RD	BECKER RD to LAKERIDGE DR	10,813	630	889	F	1.411	901	F	1.430
GLADES CUT-OFF RD	RANGE LINE RD to 0.6 MILE EAST OF RESERVE BL...	1,800	1,120	135	B	0.121	153	B	0.137

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				Volume	LOS	V/C	Volume	LOS	V/C
US 1	MARTIN COUNTY LINE to LENNARD RD	49,454	3,770	2,252	C	0.597	2,648	C	0.702
US 1	LENNARD RD to PORT ST LUCIE BLVD	49,454	3,590	2,252	C	0.627	2,648	C	0.738
US 1	MARIPOSA AVE to JENNINGS RD	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	JENNINGS RD to TIFFANY AVE	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	TIFFANY AVE to WALTON RD	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	WALTON RD to VILLAGE GREEN DR	43,551	2,940	2,359	B	0.802	2,115	B	0.719
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	52,771	3,090	2,803	C	0.907	2,625	C	0.850
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	52,771	2,810	2,803	D	0.998	2,625	D	0.934
US 1	PRIMA VISTA BLVD to RIO MAR DR	36,045	3,090	1,667	B	0.539	1,641	B	0.531
US 1	RIO MAR DR to KITTERMAN RD	30,326	2,810	1,482	C	0.527	1,342	C	0.478
US 1	KITTERMAN RD to SAEGER AVE	30,326	2,940	1,482	B	0.504	1,342	B	0.456
US 1	SAEGER AVE to EASY ST	30,326	2,450	1,482	D	0.605	1,342	D	0.548
US 1	EASY ST to MIDWAY RD	28,799	3,090	1,342	B	0.434	1,305	B	0.422
US 1	MIDWAY RD to WEATHERBEE RD	30,913	1,860	1,452	D	0.781	1,470	D	0.790
US 1	MIDWAY RD to FARMER'S MARKET RD	30,913	1,960	1,452	B	0.741	1,470	B	0.750
US 1	FARMER'S MARKET RD to EDWARDS RD	30,913	1,960	1,452	B	0.741	1,470	B	0.750
US 1	EDWARDS RD to SAVANNAH RD	32,286	1,770	1,479	D	0.836	1,451	D	0.820
US 1	GARDENIA AVE to VIRGINIA AVE	32,286	1,770	1,479	D	0.836	1,451	D	0.820
US 1	SAVANNAH RD to GARDENIA AVE	32,286	1,500	1,479	D	0.986	1,451	D	0.967
US 1	VIRGINIA AVE to OHIO AVE	31,306	1,770	1,508	D	0.852	1,519	D	0.858
US 1	OHIO AVE to GEORGIA AVE	31,306	1,770	1,508	D	0.852	1,519	D	0.858
US 1	GEORGIA AVE to DELAWARE AVE	26,466	1,770	1,365	D	0.771	1,304	C	0.737
US 1	DELAWARE AVE to CITRUS AVE	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	CITRUS AVE to ORANGE AVE	23,186	1,500	1,154	D	0.769	1,040	D	0.693
US 1	ORANGE AVE to AVENUE A	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE A to AVENUE C	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE C to AVENUE D	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE D to SEAWAY DR	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	SEAWAY DR to AVENUE H	26,500	2,060	1,518	B	0.737	1,405	B	0.682

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SECTION IX

PETITION FOR CHANGE IN ZONING TO PLANNED DEVELOPMENT ZONING DISTRICT

FUTURE LAND USE ELEMENT OBJECTIVES &POLICY ASSESSMENT

[go to next page]

1.1 Objective:

The City shall adopt and implement the Future Land Use Map to designate future land uses that regulate uses, densities and intensities that enhance its neighborhoods and districts, stimulate tourism and the local economy, and are compatible with its smalltown character.

1.1.1 Policy:

Land use shall be regulated by the adopted Future Land Use Map. (GOP Map 1-1).

The proposed Rocla Cross Tie Planned Development site is to be used for industrial purposes, which is consistent with the petition properties Future Land Use designation of I (Industrial).

1.1.2 Policy:

Gross site density and intensity of the individual Future Land Use designations depicted under Policy 1.1.1 are described in GOP Table 1-1. Within each Future Land Use Category one or more zoning districts may be permitted as set forth in the Land Development Regulations, provided that the density or intensity authorizations of the particular zoning district does not exceed general limitations set forth in GOP Table 1-1.

The proposed Rocla Cross Tie Planned Development site is to be used for industrial purposes, which is consistent with the petition properties Future Land Use designation of I (Industrial). The non-residential FAR intensity of the proposed development site does not exceed 1.5.

1.1.3 Policy:

The City shall ensure that future land use designations are compatible with adjacent land uses both within and outside the City boundary.

N/A to the subject petition. This is a Policy to be examined during an assessment of any change to the Future Land Use Maps of the City Comprehensive Plan. The proposed Rocla Cross Tie Planned Development site is to be used for industrial purposes, which is consistent with the petition properties current Future Land Use designation of I (Industrial) and the surrounding Future Land Use designations of I (Industrial) and GC (General Commercial). No Land Use Map amendment is required.

1.1.4 Policy:

The City shall administer Land Development Regulations consistent with the future land uses in this Element. The general description of each land use category is as follows:

Paragraphs A thru C – not applicable.

D. Industrial

- **<u>Boundary Industrial (BI):</u> The Boundary Industrial designation is intended for parcels suitable for industrial development and to promote the City's position as a major employment center. The uses allowed under this designation include intensive manufacturing and industrial uses, storage and distribution facilities and warehousing. This land use designation allows a maximum FAR of 1.5.**

- **<u>Industrial (I):</u> The Industrial designation is intended for parcels suitable for industrial development and to promote the City's position as a major employment center. The uses allowed under this designation include light manufacturing and processing facilities; storage and distribution facilities; warehousing; general and intensive commercial uses; research corporate parks, large business parks and mixed use office parks; office, retail, and service uses that provide support to employees; and**

compatible public, quasi-public, and special uses. This land use designation allows a maximum FAR of 1.5.

- **<u>Heavy Industrial (HI):</u> The Heavy Industrial designation is intended for parcels suitable for industrial development and to promote the City's position as a major employment center. The uses allowed under this designation include intensive manufacturing and processing facilities; storage and distribution facilities; warehousing; general and intensive commercial uses; large business parks; office, retail, and service uses that provide support to employees; and compatible public, quasi-public, and special uses. This land use designation allows a maximum FAR of 2.0.**

Paragraphs E – not applicable.

This is a Policy to be implemented by the City of Ft. Pierce through the implementation of the City's Land Development (zoning) regulations The proposed Rocla Cross Tie Planned Development site presently classified for industrial uses. The proposed use of the property is industrial. The petitioned use is consistent with both the current Future Land Use and Zoning designation applied to the petitioned property.

Refer to the proposed project site plan for consistency with the City of Ft. Pierce Land Development/Zoning Regulations.

1.1.5 Policy:

The City will allow a density bonus of 5 dwelling units per acre above the maximum permitted density for developments located within ¼ mile of a rail station, multimodal transit center, or transit stop.

N/A to the petitioned property. The project site does not propose any residential uses.

1.1.6 Policy:

The City will allow an additional market rate unit per affordable housing unit, up to a maximum of 40 units. Affordable housing developments must meet the following criteria:

1. **Located within ¼ mile of a rail station, multimodal transit center, or transit stop;**
2. **Meet the definition of affordable housing as defined by the median income of the City of Fort Pierce;**
3. **Affordable housing developments shall include a variety of housing types.**

N/A to the petitioned property. The project site does not propose any residential uses.

1.1.7 Policy:

The City will allow density bonuses if the developer provides or makes contributions above minimum requirements to facilities that provide a public benefit. Such contributions shall include park land dedication or park facilities, infrastructure and transportation facilities, beach access and fishing piers. In establishing the value of the facilities and the appropriate density bonus, the following will be considered:

- **i. hard costs: all material and labor costs for the construction of the facility**
- **ii. soft costs: fees and costs required for the design of the facility**
- **iii. land costs: land to be transferred to the City or other public agency associated with the facility**

N/A to the petitioned property. The project site does not propose any residential uses.

1.1.8 Policy:

Density bonuses are not permitted in the Coastal High Hazard Area, or environmentally sensitive areas.

N/A to the petitioned property. The project site does not propose any residential uses. The project is not located in a "Coastal High Hazard Area" or a "environmentally sensitive area".

1.1.9 Policy:

Uses which cause significant noise, light, glare, odor, vibration, dust, hazardous conditions, or industrial traffic shall provide adequate buffering when located adjacent to or in close proximity to uses such as residential.

The proposed use, the industrial manufacturing of concrete/composite railroad ties, will not "cause significant noise, light, glare, odor, vibration, dust, hazardous conditions, or industrial traffic" than might otherwise be expected of a permitted use in the Industrial future land use classification.

The petition site will be laid out so that proposed buildings will occupy the southwest section of the property with storage of the completed rail crosstie product to take place along the FEC rail tracks as they await shipment. The manufacturing building will house all of the mechanical components required as part of the manufacturing process and will be soundproofed to ensure compliance with the City's Noise control; regulations.

Rocla Concrete Tie, Inc., will employ noise reduction measures to ensure that our planned facility will not be a nuisance to the City of Fort Pierce, nor exceed the City Code limits. Several modifications have been made to our basic production operations, and will be implemented at Rocla's new Fort Pierce facility. These modifications will provide benefits in reducing the noise levels emitted by the production equipment used at this facility, compared to similar manufacturing facilities at which noise studies have been completed.

Based on noise level studies in similar plants, Rocla is confident that with the aid of these noise mitigation plans, the noise levels at the property line of our facility will not exceed the Fort Pierce code 70 db limits. Rocla is committed to do whatever it takes to ensure that our operations are not a nuisance to the nearby community or the City of Fort Pierce.

Raw materials will be shipped to the site via trucks and rail delivery. The final product, completed rail crossties, will be shipped from the site via the existing FEC railway system. Vehicular access to the proposed facility will be from an existing driveway on South 3rd Street. Access to South 3rd Street will be the current truck route along Georgia Avenue, into the existing multi-modal transfer facility in FEC Railroads, Ft. Pierce yards. This existing turnout will adequately provide access for large vehicles entering and exiting the site.

The subject parcel can be best described as an impacted urban site that has been altered from previous activity. The historic native ecosystem is no longer present on the site. The predominant vegetation is that typically found on impacted areas and consists primarily of Brazilian Pepper and scattered cabbage palm. There are no wetlands or significant topographic features on the subject site.

The proposed construction/ manufacturing activity will comply with all code required setbacks for the proposed activity. The outside perimeter of the site (excluding that portion of the property facing the existing rail switchyards) will be landscaped as required by the City codes. Native canopy trees and hedges will surround the vehicular use areas and will provide shade and buffering from off-site views. The proposed office will be landscaped with palms and foundation hedge materials.

The closest residential residential uses to the Petition Site are a minimum of 800 feet to the east (opposite the existing FEC mainline tracks and Ft. Pierce Switch Yard) and 800 feet to west (west of South Fifth Street).

1.1.10 Policy:

The City shall maintain the South Beach Overlay District in the Land Development Regulations for northern South Hutchinson Island to protect the existing neighborhoods and maintain a low-density,

"Tropical Village by the Sea" character. The City will promote opportunities for tourism-related development and require the developments to be consistent with the provisions of the overlay district and the neighborhood character.

N/A to the petitioned property and use.

1.1.11 Policy:

The City shall administer architectural guidelines for commercial and residential development to encourage historical and traditional styles native to the Fort Pierce area and new and innovative architectural design. The Design Review Guidelines adopted in 2007 shall establish the architectural guidelines for commercial and residential development.

N/A to the petitioned property and use.

1.1.12 Policy:

The City shall administer the Art in Public Places Program to include enabling language for Public Art guidelines, a Public Art Committee and methods for collecting fees on development.

N/A. This Policy address internal City Administrative processes and is not directly applicable to the petitioned property

1.1.13 Policy:

The City shall coordinate with St. Lucie County to implement the 2002 update to the Port of Fort Pierce Master Plan. The City shall meet periodically with the County to discuss the progress and actions to implement the master plan.

N/A. This Policy addresses City Policy and Administrative processes and is not directly applicable to the petitioned property

1.1.14 Policy:

The City shall continue to regulate the placement, size, and design of signs through the Land Development Regulations.

N/A. This Policy addresses general City Administrative processes and is not directly applicable to the petitioned property.

1.1.15 Policy:

The City shall discourage the proliferation of urban sprawl by assessing development for urban sprawl potential utilizing the criteria in Rule 9J-5.006(5)(g), F.A.C.

N/A. This policy addresses urban sprawl issues. The petition property is located in the existing industrial/ transportation hub of the City and will not result increased urban sprawl.

1.1.16 Policy:

The City shall require all new residential and commercial developments to install underground telephone, cable and electrical utility lines to provide a more attractive, efficient, and safer development.

N/A to the Petition Property.

1.1.17 Policy:

Reduce vehicle miles traveled (VMT) and greenhouse gas emissions (GHG) by requiring developments to maximize internal trip capture, provide pedestrian connectivity to surrounding properties, and reduce the number of auto-oriented trips through Transportation Demand Management (TDM).

N/A in part to the Petition Property. The Petition Property is located near (1 block away) from three (3) of the existing Community Transit, Public Transit Routes serving the Ft. Pierce area, whereby employee trips to the job site can be reduced through the use of public transportation. The petitioners will make available to all employees reference information as to the availability of public transportation in the area and directions as to where further route information can be found.

1.1.18 Policy:

The City shall complete a feasibility study for a marine industrial zone along Taylor Creek consistent with the Taylor Creek Charrette.

N/A to the petition property.

1.1.19 Policy:

The City shall encourage the utilization of green building techniques, designs, and materials that meet the Leadership in Energy and Environmental Design (LEED) rating system administered by the United States Green Building Council, the Florida Green Building Coalition standards or other nationally recognized green building rating systems, through incorporation of sustainable strormwater management practices, preservation of native species, provision of pedestrian connectivity between sites, usage of low impact building materials, and usage of renewable energy sources within the Land Development Regulations.

N/A. This Policy addresses general City Administrative processes.

1.2 Objective:

The City shall use innovative Land Development Regulations to encourage flexibility in development to support compact, mixed uses compatible with the local context and character. These regulations shall include transit oriented development, transfer of development rights, density bonuses, planned unit developments and other mixed land use development provisions, where appropriate.

N/A to the Petition Property.

1.2.1 Policy:

The City shall amend its Land Development Regulations to establish development standards for transit-oriented developments to support transit service once the plans and location for the future AMTRAK rail service are in place to promote walkability and transit ridership. These standards shall include but not be limited to:

- **designation of a Transit Oriented Overlay District around the future AMTRAK station;**
- **requiring minimum densities within the district;**
- **requiring construction of continuous sidewalks on both sides of the roadway within the district.**

N/A to the Petition Property.

1.2.2 Policy:

The City shall develop a transfer of development rights (TDR) program to protect natural and historic resources and provide incentives for development within targeted areas of the City.

N/A to the Petition Property.

1.3 Objective:

As development and redevelopment occur within the City, the City shall encourage the elimination or reduction of existing land uses inconsistent with the City's character and future land use.

The proposed Planned Development site is to be used for industrial purposes, which is consistent with the petition properties Future Land Use designation of I (Industrial).

1.3.1 Policy:

The City shall evaluate land use amendment applications and development proposals for compatibility with the Comprehensive Plan, the City's character, future land use designation, and the adjacent properties.

N/A to the Subject Petition. This is a Policy to be examined during an assessment of any change to the Future Land Use Maps of the City Comprehensive Plan. The proposed Rocla Cross Tie Planned Development site is to be used for industrial purposes, which is consistent with the petition properties current Future Land Use designation of I (Industrial) and the surrounding Future Land Use designations of I (Industrial) and GC (General Commercial). No Land Use Map amendment is required.

1.3.2 Policy:

The City will permit the redevelopment of a non-conforming use when the redevelopment will result in a use that is more conforming to the permitted uses in the existing zoning district. The City will require such redevelopment to bring the site into compliance with parking, landscaping, signage, open space, and stormwater management requirements.

N/A to the subject petition.

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LAND USE AND TRANSPORTATION

1.4 Objective:

Coordinate the transportation and land use planning activities of Fort Pierce to ensure that the roadway level of service (LOS) standards established within the Comprehensive Plan are maintained.

N/A to the subject petition.

1.4.1 Policy:

The City shall evaluate land use with transportation impacts for all land use and development applications which will direct planned improvements in the Schedule of Capital Improvements and the Capital Improvements Element.

The traffic impacts of the proposed use of the petition property have been analyzed in the current and future year (2020) condition for both annual daily traffic and AM/PM peak hour conditions. The analysis concludes that the development of the proposed manufacturing facility will have no effect on the Levels of Service within the project impact area, and the local roadway network will continue to maintain an acceptable level of service and function properly after the development of the project. Report details can be found in the application for zoning change to Planned Unit Development.

1.4.2 Policy:

The City will require traffic impact studies for all future land use changes, rezonings, and development applications. Applicants will be required to demonstrate the traffic impacts according to professionally accepted traffic engineering practices.

A traffic impact of the proposed Manufacturing use of the petition property has been completed in accordance with the requirements of the City of Ft. Pierce City Code Chapter 22.217. The traffic impacts of the proposed use of the petition property have been analyzed in the current and future year (2020) condition for both annual daily traffic and AM/PM peak hour conditions. The analysis concludes that the development of the proposed manufacturing facility will have no effect on the Levels of Service within the project impact area, and the local roadway network will continue to maintain an acceptable level of service and function properly after the development of the project. Report details can be found in the application for zoning change to Planned Unit Development.

1.4.3 Policy:

The City shall evaluate the individual and cumulative impacts of land use plan amendments on the existing and planned transportation facilities within the City and County.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

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TRAFFIC CIRCULATION

1.5 Objective:

The City shall administer Land Development Regulations that manage access to adjacent roadways, require adequate onsite traffic circulation and offstreet parking for all development.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.5.1 Policy:

The City shall protect the local, regional, and state roadway network.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.5.2 Policy:

The City shall maintain land use regulations which ensure safe and convenient onsite traffic circulation and adequate off-street parking for all development.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.5.3 Policy:

The City shall require all new developments to provide a pedestrian network with internal pedestrian connectivity and interconnections to existing and planned infrastructure on adjacent properties.

Pedestrian access connections to South 3rd Street have been provided as part of this proposed Planned Unit Development. Because of the nature of this proposed use, and its location, adjacent to the FEC main line, cross pedestrian connections have not been provided

1.5.4 Policy:

The City shall require construction or maintenance of sidewalks for new or rehabilitated buildings throughout the City to meet the Americans with Disabilities Act.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.5.5 Policy:

The City Planning Department shall coordinate with the City Engineer and the Florida Department of Transportation for access to state roadways.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

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CONCURRENCY

1.6 Objective:

The City shall administer a concurrency management system to ensure public facilities are available concurrent with development and redevelopment. Transportation facilities will be monitored through a local program which functions similar to a concurrency system but is not subject to state mandated concurrency. It is now being referred to as a Transportation Monitoring System.

N/A. This Objective addresses specific City Administrative processes that are to be followed by the City.

1.6.1 Policy:

Land use regulations shall require that facilities and services meet the established LOS standards, and are available concurrent with the impacts of development.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.6.2 Policy:

If a public facility or facility capacity is not available prior to the issuance of a building permit or functional equivalent, the City may issue development orders and permits conditioned on the availability of the facilities and services necessary to serve the proposed development being provided prior to the certification of occupancy.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.6.3 Policy:

The City shall assess new development and redevelopment a proportionate fairshare of the public facility costs to accommodate the impacts of the development to maintain the adopted LOS through the enforcement of existing public facility funding mechanisms and impact fees. Public facilities include potable water, sanitary sewer, solid waste, drainage, parks, schools, and roadways.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.6.4 Policy:

The City shall require development to contribute a proportionate share of the cost for public facility improvements required to meet the demands of the development by utilizing a variety of mechanisms to assess and collect impact fees, dedications and/or contributions.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.6.5 Policy:

Prior to approving a building permit, or its functional equivalent, the City shall consult with the Fort Pierce Utility Authority, to determine whether adequate water supplies will be available to serve the development no later than the anticipated date of issuance of a certificate of occupancy, or its functional equivalent, by the City.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.7 Objective:

The City shall require that easements be dedicated prior to issuance of a building permit to accommodate utilities necessary to serve development

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City. All required easements will be provided as necessary.

1.7.1 Policy:

The City's Land Development Regulations shall require dedication of suitable land for utility facilities necessary to support developments including water and wastewater, drainage ways, electricity transmission, telephone and cable television, and other required utilities, prior to issuance of a building permit.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City. All required conveyances will be provided as necessary.

1.8 Objective:

The City will coordinate with the Community Redevelopment Agency (CRA) to address blighted areas in the City, provide basic needs of the area, discourage urban sprawl, and take advantage of opportunities for economic, social, or aesthetic improvements.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.8.1 Policy:

Redevelopment shall be guided by the 2001 Community Redevelopment Area Plan within the adopted CRA boundary.

This Policy addresses specific City Administrative processes that are to be followed by the City. The proposed industrial use of this property is consistent with the 2001 Community Redevelopment Area Plan

1.8.2 Policy:

The City will coordinate with the CRA to encourage redevelopment and reinvestment within the Community Redevelopment Area:

1. **Create a lively Downtown/Waterfront area with mixed-use development, water enhanced activities, and historic preservation.**
2. **Promote affordable housing through grants and loans for homeownership, corrections of code deficiencies, land trusts, and technical assistance.**
3. **Enhance public open spaces, small community centers, amphitheaters, and address public access to the waterfront.**
4. **Encourage the construction of shared parking facilities, both public and private, to meet the current and future demand.**
5. **Expand historic preservation through facade grants and encourage adaptive reuse of existing historic structures in redevelopment proposals.**
6. **Increase employment and business opportunities in the area through a Human Development and Resources Center, relocation incentives and new business recruitment.**
7. **Improve street appearance through streetscape and urban design strategies that enhance the pedestrian environment.**
8. **Stabilize the beaches against erosion.**
9. **Enhance Fort Pierce's history as a transit hub by continued support for the Transit Greenways principles, a Downtown Trolley, a passenger train station and transit connections between the AMTRAK station and the beach for low and moderate-income workers.**

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.8.3 Policy:

Implement the Fort Pierce Downtown Waterfront Charrette recommendations and the Citizens' Master Plan, prepared by the Treasure Coast Regional Planning Council in 2008, including the creation of a local

urban destination characterized by a mix of uses, compactness, preservation of architectural integrity and functional linkages that encourage pedestrian activity, address zoning inconsistencies, develop a merchandising strategy for retailers, and develop a form-based code by 2012.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.8.4 Policy:

The City shall coordinate with the CRA, Main Street Fort Pierce and Lincoln Park Main Street for Downtown area marketing, business recruitment, public artworks creation, redevelopment grants, and businesses and property owner incentives.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.8.5 Policy:

The City shall coordinate with the CRA to create a Downtown Parking Management Plan including district-wide parking strategies.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.8.6 Policy

The City shall develop administrative procedures that modify development requirements and streamline development approval procedures for projects with the following:

- **Affordable housing;**
- **Mixed use projects with residential;**
- **Adaptive reuse of historic structures;**
- **Brownfield site redevelopment.**

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

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NEIGHBORHOOD PLANNING

1.9 Objective

The City shall support neighborhood planning programs that create physical and economic revitalization of neighborhoods and enhance public safety to maintain the stability and character of the City's neighborhoods.

N/A. This Policy addresses specific City Administrative processes that are to be followed by the City.

1.9.1 Policy:

The City will continue the Neighborhood Enhancement Action Team (NEAT) Program to encourage reinvestment in central city neighborhoods through the combined efforts of City departments such as the Planning Department, the Engineering Department, the Building Department, the Public Works Department, the Police Department, and the Solid Waste Department to address multiple issues in the Fort Pierce community.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.9.2 Policy:

The City shall target public investments such as infrastructure improvements based upon the adopted special area plans to increase homeownership and property values.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.9.3 Policy:

The City of Fort Pierce shall undertake special area plans to stabilize and revitalize existing neighborhoods. Special area plans shall include the following:

1. **Delineation of planning area.**
2. **Review of existing zoning and land use.**
3. **Analysis of existing transportation issues including continuity of existing transportation grid in new development.**
4. **Analysis of infrastructure (drainage, potable water, sewer, roadways)**
5. **Inventory of cultural and historic resources.**
6. **Inventory of recreation and open space areas, schools, and institutional uses.**
7. **Inventory of existing residential, commercial and industrial uses.**
8. **Goals, objectives, and polices for the special area plan that address physical and economic revitalization and public safety issues.**
9. **Programs and capital improvements that will enhance the neighborhood.**
10. **Public participation including meetings and charrettes with neighborhood associations, homeowners groups, and business groups, as appropriate.**
11. **As appropriate, after public participation, utilize future land use map and text amendments, the zoning atlas and text amendments, zoning overlays, and/or design standards to implement any plans.**

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.9.4 Policy:

The City shall undertake the development of special area plans for the following neighborhoods (in no particular order). The City will strive to complete one plan annually.

1. **Avenue D Historic District**
2. **Downtown Historic District**
3. **Edgartown Historic District**

4. **River's Edge Historic District**
5. **South Beach District**
6. **Performing Arts District**

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.9.5 Policy:

The City shall consider incentives for neighborhood enhancement such as commercial facade and other grants for businesses, tax incentives for historic preservation, and technical assistance from City staff.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.9.6 Policy:

The City shall continue its code enforcement program to maintain the character of residential areas and protect public health, safety, and welfare.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

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ECONOMIC DEVELOPMENT

1.10 Objective:

The City shall promote economic growth through commercial and industrial development to create employment opportunities and increase the City's tax and economic base.

The proposed Planned Development, Rocla Cross Tie, will provide for new employment and industrial tax base opportunity for the City of Ft. Pierce.

1.10.1 Policy:

The City shall coordinate with the CRA and the local chamber of commerce to implement economic development strategies to attract desired businesses and industry.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.10.2 Policy:

The City shall ensure that the FLUM allocates sufficient lands for commercial and industrial purposes to serve future growth needs of the City.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.10.3 Policy:

The City shall promote entrepreneurship skills programs to interested students and residents as an integral part of the economic diversity strategy.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.10.4 Policy:

The City shall promote Fort Pierce as a tourist destination including its historic, cultural, and environmental tourism opportunities.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.10.5 Policy:

The City shall encourage minority-owned businesses to obtain State and Federal funds to promote development of those businesses and industries.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.10.6 Policy:

The City shall encourage expansion of degree programs at Indian River State College as well as education for job training to expand the local skilled labor force.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.10.7 Policy:

The City shall coordinate with St. Lucie County to implement the Port of Fort Pierce Master Plan to achieve its economic development goals.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

ANNEXATION

1.11 Objective

Annex properties within the Fort Pierce Utilities Authority Boundary in an orderly manner that promotes efficiency of public service provision and economic vitality of the City.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.1 Policy:

The City shall evaluate proposed annexations within the urban service boundary based upon the following criteria:

1. **The ability of the City to provide public services at a level equal to or better than that available from the current service providers;**
2. **The ability of the City to provide public services at the City's adopted levels of service;**
3. **Whether the annexation would eliminate an unincorporated island or could be expanded to eliminate an unincorporated island; and**
4. **Whether the annexation would eliminate an irregularity or irregularities in the City's boundaries, thereby improving service delivery.**

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.2 Policy:

The City shall develop a phased annexation program based on the City's ability to serve and benefit the City. The program shall establish phasing and timing guidelines with priority placed on annexing enclaves, pocket, and infill areas.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.3 Policy:

The annexation program shall include fiscal impact analyses and plans for maintaining level of service standards consistent with the Comprehensive Plan.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.4 Policy:

The Capital Improvement Element will be updated annually to include any annexation related capital improvements that will be implemented to maintain the adopted LOS standard for all public facilities.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.5 Policy:

Properties annexed shall receive a land use designation compatible with its county land use designation, unless otherwise approved by the City Commission.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.6 Policy:

The proposed Future Land Use Map (GOP Map 1-2) shall be used as a guide for land use designations for annexed properties.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.7 Policy:

Existing structures on newly annexed properties shall be assessed for historic value according to the City's historic preservation ordinance and, if found to have such value, be incorporated into the City's list of designated structures.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.8 Policy:

Population projections reflecting annexations shall be prepared as part of the annual update of the 5-Year Schedule of Capital Improvements.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.11.9 Policy:

The City shall pursue a joint planning agreement with St. Lucie County as provided in Section 163.3171(1), F.S., for the area currently outside the City's municipal boundary that is located within the urban service boundary, as identified on Map 1-2.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

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SCHOOL SITING

1.12 Objective:

Coordinate with the St. Lucie County School Board to ensure that the residents of the City of Fort Pierce are provided the highest quality educational facilities to meet the existing and future needs of the population.

N/A. This Objective addresses specific City Policy and Administrative processes that are to be followed by the City.

1.12.1 Policy:

The City shall allow schools in all Future Land Use categories except the following categories: Boundary Industrial (BI), Industrial (I), Heavy Industrial (HI) and Conservation and Open Space (COS).

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.12.2 Policy:

The City shall include in the categories sufficient land proximate to residential development to meet the projected needs for schools in coordination with the St. Lucie County School Board.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.12.3 Policy:

The City shall include lands contiguous to existing school sites, to the maximum extent possible, within the land use categories in which public schools are an allowable use.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.12.4 Policy:

Encourage the location of schools proximate to urban residential areas to the fullest extent possible.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.12.5 Policy:

The City shall require the collocation of public facilities, such as parks, libraries, and community centers, with schools to the extent possible and to encourage the use of elementary schools as focal points for neighborhoods.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

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HAZARD MITIGATION

1.13 Objective:

Coordinate with St. Lucie County and the State of Florida regarding coastal planning area population densities, land use planning, evacuation, and disaster preparedness.

N/A. This Objective addresses specific City Policy and Administrative processes that are to be followed by the City.

1.13.1 Policy:

The City shall maintain evacuation times by evaluating all development proposals in the Coastal High Hazard Area to determine impacts to evacuation and consistency with the City's hurricane evacuation plans.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed Rocla Cross Tie Planned Development (PD) *is not* located in a designated *Coastal High Hazard Area.*

1.13.2 Policy:

Proposed developments that are demonstrated to create an increase in evacuation times will be required to provide mitigation measures, including but not limited to roadway improvements, to maintain hurricane evacuation times in the hurricane vulnerability zone.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed Rocla Cross Tie Planned Development (PD) *is not* located in a designated *Coastal High Hazard Area.*

1.13.3 Policy:

The City shall coordinate with St. Lucie County and the Treasure Coast Regional Planning Council to develop standards and guidelines to assess evacuation times for development within the evacuation areas.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.13.4 Policy:

Encourage the elimination or reduction of uses that are inconsistent with any interagency hazard mitigation report recommendations that the local government determines to be appropriate.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.14 Objective:

The City shall prepare hazard mitigation, disaster preparedness, and post disaster redevelopment plans to effectively bring public services back online, coordinate cleanup efforts, and rebuild damaged or destroyed public and private property by 2012.

N/A. This Objective addresses specific City Policy and Administrative processes that are to be followed by the City.

1.14.1 Policy:

The post-disaster redevelopment plan shall ensure that actions needed to protect the public health and safety shall receive first priority in emergency permitting decisions.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.14.2 Policy:

The City shall coordinate their post-disaster redevelopment plan with the County Emergency Management Office for compliance with the Local Peacetime Emergency Plan.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.14.3 Policy:

Post-disaster redevelopment and hazard mitigation plans should inventory hazard prone properties and implement building codes and development regulations, such as setback provisions, structural connections, and other site controls, to reduce future property damages and losses.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

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HISTORIC PRESERVATION

1.15 Objective:

Provide identification, protection and awareness of archeological and historic resources to preserve the City's unique economic, political, scientific, religious, and architectural history.

N/A. This Objective addresses specific City Policy and Administrative processes that are to be followed by the City.

1.15.1 Policy:

At all times, the City of Fort Pierce shall maintain a current and complete inventory of all officially designated historic sites and historic districts.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.15.2 Policy:

The City of Fort Pierce shall implement programs, policies and regulations to preserve and encourage the rehabilitation of historic resources through techniques such as historic overlay districts and building code provisions.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.15.3 Policy:

The City of Fort Pierce shall coordinate historic resource protection activities, procedures and programs with applicable state and federal laws, policies and guidelines.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.15.4 Policy:

The City of Fort Pierce shall encourage the rehabilitation and adaptive reuse of historically significant buildings and structures in lieu of demolition.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed development site for the Rocla Cross Tie facility, has no historic structures located on it.

1.15.5 Policy:

The City of Fort Pierce shall promote the proper maintenance, restoration, preservation, rehabilitation, or reconstruction appropriate to historic sites, and compatible contemporary designs which are harmonious with the exterior architectural and landscape features of neighboring historic buildings, sites, and streetscapes.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed development site for the Rocla Cross Tie facility, has no historic structures located on it.

1.15.6 Policy:

The City of Fort Pierce shall promote the awareness of historic preservation and its community benefits to the general public and to school children through promotional materials, guidebooks, tours, informational brochures, educational tools, workshops, lectures, and presentations.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed development site for the Rocla Cross Tie Tie facility, has no historic structures located on it.

1.15.7 Policy:

The City of Fort Pierce, during the review and evaluation process, shall consider potentially harmful impacts of land use plan amendments and site development approvals on resources of historic significance.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed development site for the Rocla Cross Tie facility, has no historic structures located on it.

1.15.8 Policy:

The City of Fort Pierce shall retain a Historic Preservation Board to evaluate, review and recommend to the City Commission properties for designation as historic sites and districts, and to review alterations to historic sites and structures.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed development site for the Rocla Cross Tie facility, has no historic structures located on it.

1.15.9 Policy:

The City shall provide grants and loans for historic facade restoration for structures listed in the City's inventory of historic structures.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed development site for the Rocla Cross Tie facility, has no historic structures located on it.

1.15.10 Policy:

No building, structure, improvement, landscape feature, or site within the City that has been designated a historic site or historic district, shall be erected, altered, restored, rehabilitate, excavated, moved or demolished until an application for a certificate of appropriateness has been reviewed and approved by the Historic Preservation Board.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed development site for the Rocla Cross Tie facility, has no historic structures located on it.

1.15.11 Policy:

The City of Fort Pierce shall encourage quality new construction and developments that are harmonious with neighboring historic sites and historic districts.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.15.12 Policy:

The City and its Historic Preservation Board shall address alteration, removal, destruction, or development of structures within the following historic districts:

1. **Avenue D**
2. **Sample Oaks**
3. **Oakland Park**
4. **Edgar Town**
5. **Downtown**
6. **River's Edge**

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The proposed development site for the Rocla Cross Tie facility, as no historic structures located on it.

NATURAL RESOURCE PROTECTION

1.16 Objective:

The City shall ensure that the natural resources are protected in accord with the goals, objectives, and policies in the Conservation and Coastal Management Elements and enforcement of the Land Development Regulations, especially in the review of all new development and redevelopment.

N/A. This Objective addresses specific City Policy and Administrative processes that are to be followed by the City.

1.16.1 Policy:

The City shall require approval from all applicable external agencies regarding the protection of environmentally sensitive habitat and shall require consistency with the policies in the Plan that govern the following:

1. **Management of surface water;**
2. **Preservation of open space;**
3. **Preservation of native vegetation; and**
4. **Preservation of environmentally sensitive habitats.**

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.16.2 Policy:

The City shall distribute land uses in a manner that avoids or minimizes, to the greatest degree practicable, negative impacts on lands recognized by the county, state or federal government as environmentally sensitive.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.16.3 Policy:

The City shall require site plan review of all proposed development or redevelopment to prevent unnecessary destruction or inappropriate use of existing natural resources and natural sites.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.16.4 Policy:

When a parcel proposed for development contains more than one habitat type, the City shall require development to avoid the most sensitive natural areas to the maximum extent feasible through clustering provisions.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.16.5 Policy:

The City shall coordinate their development review and permitting programs with the wetland permitting and mitigation programs of the appropriate local, state and federal jurisdictional agencies.

There are no wetlands or significant topographic features on the subject site.

1.16.6 Policy:

The City shall require all development applications to minimize tree removal as a part of land development. The City shall require a tree survey to be provided which identifies trees for removal, relocation, and protection.

A tree survey has been provided as part of the application for Planned Development (PD) approval for the Rocla Cross Tie facility. The subject parcel can be best described as an impacted urban site that has been altered from previous activity. The historic native ecosystem is no longer present on the site. The predominant vegetation is that typically found on impacted areas and consists primarily of Brazilian Pepper and scattered cabbage palm.

1.17 Objective:

Develop and implement land use controls and programs to preserve and enhance the Indian River Lagoon and other surface waters for their important natural functions, and aesthetic and recreational values.

N/A. This Objective addresses specific City Policy and Administrative processes that are to be followed by the City.

1.17.1 Policy:

The City's Land Development Regulations shall protect surface waters in conformance with State and South Florida Water Management District (SFWMD) policies.

The Rocla Cross Tie Planned Development project will comply with all applicable City stormwater regulations as part of the Site Plan Review process.

1.17.2 Policy:

New development adjacent to or in the vicinity of surface waters shall be designed to maintain the water quality of these surface waters and provide retention and discharge of stormwater runoff in conformance with State and SFWMD policies.

The Rocla Cross Tie Planned Development project will comply with all applicable City stormwater regulations as part of the Site Plan Review process.

1.17.3 Policy:

The City shall require open space as a part of the requirements for all development and redevelopment to promote shallow water aquifer recharge and stormwater filtration.

Consistent with the requirement of the Ft. Pierce City Code, the proposed Rocla Cross Tie facility provides a minimum 20% of the gross site areas as permeable open space, which will, per the above Policy, enhance shallow water aquifer recharge and stormwater filtration.

1.17.4 Policy:

The City shall monitor the activities of the Port Authority to ensure the goals, objectives, and policies for the Port of Fort Pierce Master Plan are implemented, particularly Goal 3 regarding environmental protection and the Indian River Lagoon.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

[go to next page]

POTABLE WATER SUPPLY PROTECTION

1.18 Objective:

Protect the quality and quantity of Fort Pierce's potable water supply as depicted on the Fort Pierce Future Land Use Maps.

N/A. This Objective addresses specific City Policy and Administrative processes that are to be followed by the City.

1.18.1 Policy:

Amendments to the Future Land Use Map proposing land use categories which permit industrial uses shall be discouraged, to the greatest extent feasible, within wellfield protection zones of influence.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.18.2 Policy:

When new sewers are extended into an area currently using septic systems for wastewater disposal, all buildings must connect with the public wastewater collection system within the time frame required by Florida Statutes.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.18.3 Policy:

New subdivisions shall provide sewerage and connections to the City's sanitary sewer system for each lot in the development.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

[go to next page]

FLOOD PROTECTION

1.19 Objective:

Eliminate flooding occurrences in the City while preserving groundwater quality through the coordination of future land uses with topography and soil conditions, provision of drainage and stormwater management systems, and the adoption of appropriate development codes and regulations.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.19.1 Policy:

The Land Development Regulations shall implement floodplain protection provisions pursuant to the criteria and mapping of the Federal Emergency Management Administration (FEMA) and the South Florida Water Management District (SFWMD).

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.19.2 Policy:

Through the Land Development Regulations, public roads and parking lots shall be designed consistent with the criteria of the SFWMD.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The Rocla Cross Tie Planned Development project will comply with all applicable City stormwater regulations as part of the Site Plan Review process.

1.19.3 Policy:

New development encroaching into the 100-year floodplain shall incorporate elevation and flood protection measures sufficient to protect against the 100-year flood. The City shall maintain consistency with program policies of the National Flood Insurance Program and shall monitor new cost effective programs for minimizing flood damage. Such programs may include modifications to construction setback requirements or other site design techniques, as well as upgraded building and construction techniques.

The Rocla Cross Tie Planned Development project is not located in any designation flood hazard zone. The Rocla Cross Tie Planned Development project will comply with all applicable City stormwater regulations as part of the Site Plan Review process.

1.19.4 Policy:

New development shall provide stormwater retention equal to that which existed under predevelopment conditions consistent with the regulations and plans of the SFWMD, St. Lucie County Environmental Resources Department and independent drainage districts, as appropriate.

The Rocla Cross Tie Planned Development project will comply with all applicable City stormwater regulations as part of the Site Plan Review process.

1.19.5 Policy:

The City shall continue to implement regulations in the City Code to address stormwater management that may be attributed to local topography, flooding frequency, soil and other applicable environmental conditions including minimum design criteria for stormwater management improvements such as performance standards for maximum lot coverage and on-site retention areas.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City. The Rocla Cross Tie Planned Development project will comply with all applicable City stormwater regulations as part of the Site Plan Review process.

SPOIL SITES

1.20 Objective:

The City shall coordinate with the Florida Inland Navigation District (FIND) and other appropriate state and federal agencies to ensure that adequate dredge spoil disposal sites are available based upon the Indian River Lagoon Spoil Island Management Plan.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.20.1 Policy:

The City shall coordinate the siting of new dredge disposal sites with the County and adjacent municipalities and the Spoil Island Working Group (SIWG).

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.20.2 Policy:

Site selection criteria shall ensure sufficient sites to meet future needs, be consistent with environmental and natural resource protection policies established in this plan and meet reasonable cost and transportation requirements.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.20.3 Policy:

The City shall consider the land use designation of future dredge spoil sites based on the following criteria: archaeological resources, wetlands, vegetation, habitat, land use, topography, soil conditions, access points, development suitability, and ability to accommodate technical and logistical requirements for conveyance and storage.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

[go to next page]

ENERGY EFFICIENCY AND CONSERVATION

1.21 Objective:

The City shall adopt and maintain Land Development Regulations which incorporate concepts for managing land, water and energy resources in a sustainable and energy efficient manner that is responsive to innovative development and conservation techniques as outlined in the policies below.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.21.1 Policy:

Site planning standards shall be adopted which require new development and redevelopment to incorporate energy conservation measures in the site layout and design. These standards shall focus on environmental features such as landscape, sun, wind, and substitutes for energy-intensive technologies.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.21.2 Policy:

The City shall adopt and enforce energy efficient building codes and promote energy efficiency in building heating and cooling systems which incentivizes practices such as usage of renewable, recycled and low emitting materials, indoor air quality management plan, increased ventilation, proper disposal and reuse of construction waste, optimized energy performance, on-site renewable energy and water usage reduction.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.21.3 Policy:

The City shall require energy efficient housing through use of renewable energy resources in existing and new housing.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.21.4 Policy:

The City shall require in all rehabilitation and replacement projects use of green, energy efficient materials as appropriate.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.22 Objective

The City will coordinate land use and transportation decisions to reduce vehicle miles traveled (VMT) and the number of automobile trips required for daily needs to reduce greenhouse gas emissions through implementation of the following policies:

N/A. This Objective addresses specific City Policy and Administrative processes that are to be followed by the City.

1.22.1 Policy:

The City shall maintain a well connected pedestrian and bicycle network to reduce greenhouse gas emissions by completing missing sidewalk and bicycle segments through incorporation of projects into the City's Capital Improvements Program and through regional coordination efforts with St. Lucie County and the FDOT.

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

1.22.2 Policy:

The City shall improve access to transit, bicycling and pedestrian facilities. The City shall implement land use and community design features which contribute to energy efficiency and green house gas reduction, including, but not limited to:

1. **Promoting smaller block sizes within large scale developments and redevelopment projects through good site design criteria.**
2. **Requiring a mix of land uses in most future land use classifications.**
3. **Allowing higher densities and intensities in all future land use classifications, especially within the City Core and along major corridors.**
4. **Requiring provision of pedestrian/bicycle facilities in all new developments and redevelopment proposals.**
5. **Requiring access to existing transit facilities as well as construction of new transit shelters associated with new development.**
6. **Providing traffic calming features within residential neighborhoods and around schools and community facilities.**

N/A. This Policy addresses specific City Policy and Administrative processes that are to be followed by the City.

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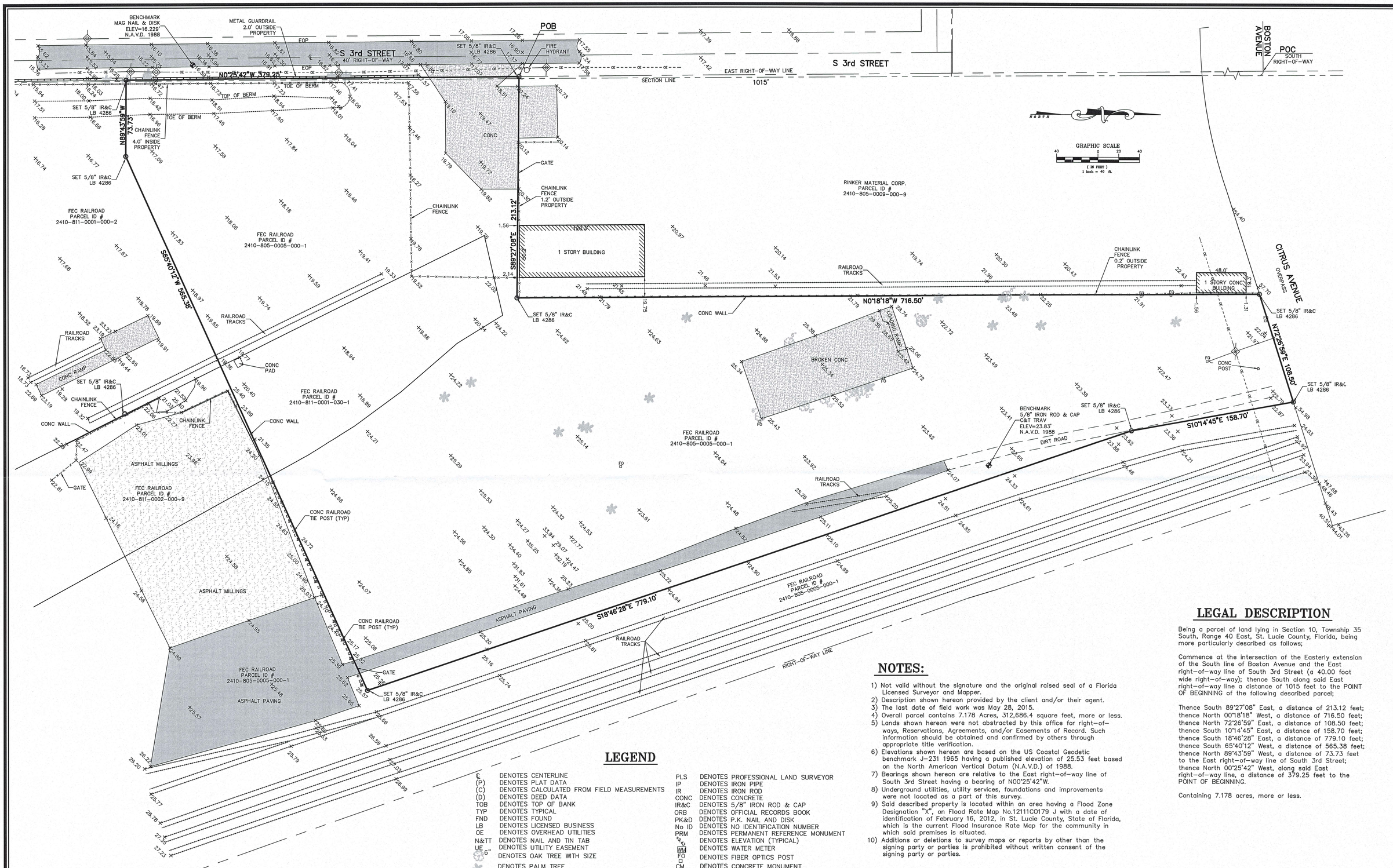

LEGEND

℄	DENOTES CENTERLINE
(P)	DENOTES PLAT DATA
(C)	DENOTES CALCULATED FROM FIELD MEASUREMENTS
(D)	DENOTES DEED DATA
TOB	DENOTES TOP OF BANK
TYP	DENOTES TYPICAL
FND	DENOTES FOUND
LB	DENOTES LICENSED BUSINESS
OE	DENOTES OVERHEAD UTILITIES
N&TT	DENOTES NAIL AND TIN TAB
UE	DENOTES UTILITY EASEMENT
6"	DENOTES OAK TREE WITH SIZE
	DENOTES PALM TREE
PLS	DENOTES PROFESSIONAL LAND SURVEYOR
IP	DENOTES IRON PIPE
IR	DENOTES IRON ROD
CONC	DENOTES CONCRETE
IR&C	DENOTES 5/8" IRON ROD & CAP
ORB	DENOTES OFFICIAL RECORDS BOOK
PK&D	DENOTES P.K. NAIL AND DISK
No ID	DENOTES NO IDENTIFICATION NUMBER
PRM	DENOTES PERMANENT REFERENCE MONUMENT
+24.41	DENOTES ELEVATION (TYPICAL)
WM	DENOTES WATER METER
FO	DENOTES FIBER OPTICS POST
□	DENOTES CONCRETE MONUMENT

NOTES:

1) Not valid without the signature and the original raised seal of a Florida Licensed Surveyor and Mapper.
2) Description shown hereon provided by the client and/or their agent.
3) The last date of field work was May 28, 2015.
4) Overall parcel contains 7.178 Acres, 312,686.4 square feet, more or less.
5) Lands shown hereon were not abstracted by this office for right-of-ways, Reservations, Agreements, and/or Easements of Record. Such information should be obtained and confirmed by others through appropriate title verification.
6) Elevations shown hereon are based on the US Coastal Geodetic benchmark J-231 1965 having a published elevation of 25.53 feet based on the North American Vertical Datum (N.A.V.D.) of 1988.
7) Bearings shown hereon are relative to the East right-of-way line of South 3rd Street having a bearing of N00°25'42"W.
8) Underground utilities, utility services, foundations and improvements were not located as a part of this survey.
9) Said described property is located within an area having a Flood Zone Designation "X", on Flood Rate Map No.12111C0179 J with a date of identification of February 16, 2012, in St. Lucie County, State of Florida, which is the current Flood Insurance Rate Map for the community in which said premises is situated.
10) Additions or deletions to survey maps or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.

LEGAL DESCRIPTION

Being a parcel of land lying in Section 10, Township 35 South, Range 40 East, St. Lucie County, Florida, being more particularly described as follows;

Commence at the intersection of the Easterly extension of the South line of Boston Avenue and the East right-of-way line of South 3rd Street (a 40.00 foot wide right-of-way); thence South along said East right-of-way line a distance of 1015 feet to the POINT OF BEGINNING of the following described parcel;

Thence South 89°27'08" East, a distance of 213.12 feet; thence North 00°18'18" West, a distance of 716.50 feet; thence North 72°26'59" East, a distance of 108.50 feet; thence South 10°14'45" East, a distance of 158.70 feet; thence South 18°46'28" East, a distance of 779.10 feet; thence South 65°40'12" West, a distance of 565.38 feet; thence North 89°43'59" West, a distance of 73.73 feet to the East right-of-way line of South 3rd Street; thence North 00°25'42" West, along said East right-of-way line, a distance of 379.25 feet to the POINT OF BEGINNING.

Containing 7.178 acres, more or less.

THOMAS P. KIERNAN
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATE NO. 6199

SIGNATURE DATE 5/28/15

COMPUTER FILE REF.	FIELD BK./PG.
14-189map2.dwg	

CULPEPPER & TERPENING, INC
CONSULTING ENGINEERS | LAND SURVEYORS
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151 SW FLAGLER AVENUE • STUART, FLORIDA 34994
PHONE 772-220-3376 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA CERTIFICATION No. LB 4286

- REVISIONS -	BY	DATE
CHANGED AREA OF SURVEY, REVISED LEGAL DESCRIPTION	GLM	5-28-15
CHANGED AREA OF SURVEY, REVISED LEGAL DESCRIPTION	GLM	3-26-15

	BY	DATE
FIELD		
CALCS.		
DRAWN	GLM	12-10-14
DETAILED		
CHECKED		
APPROVED		

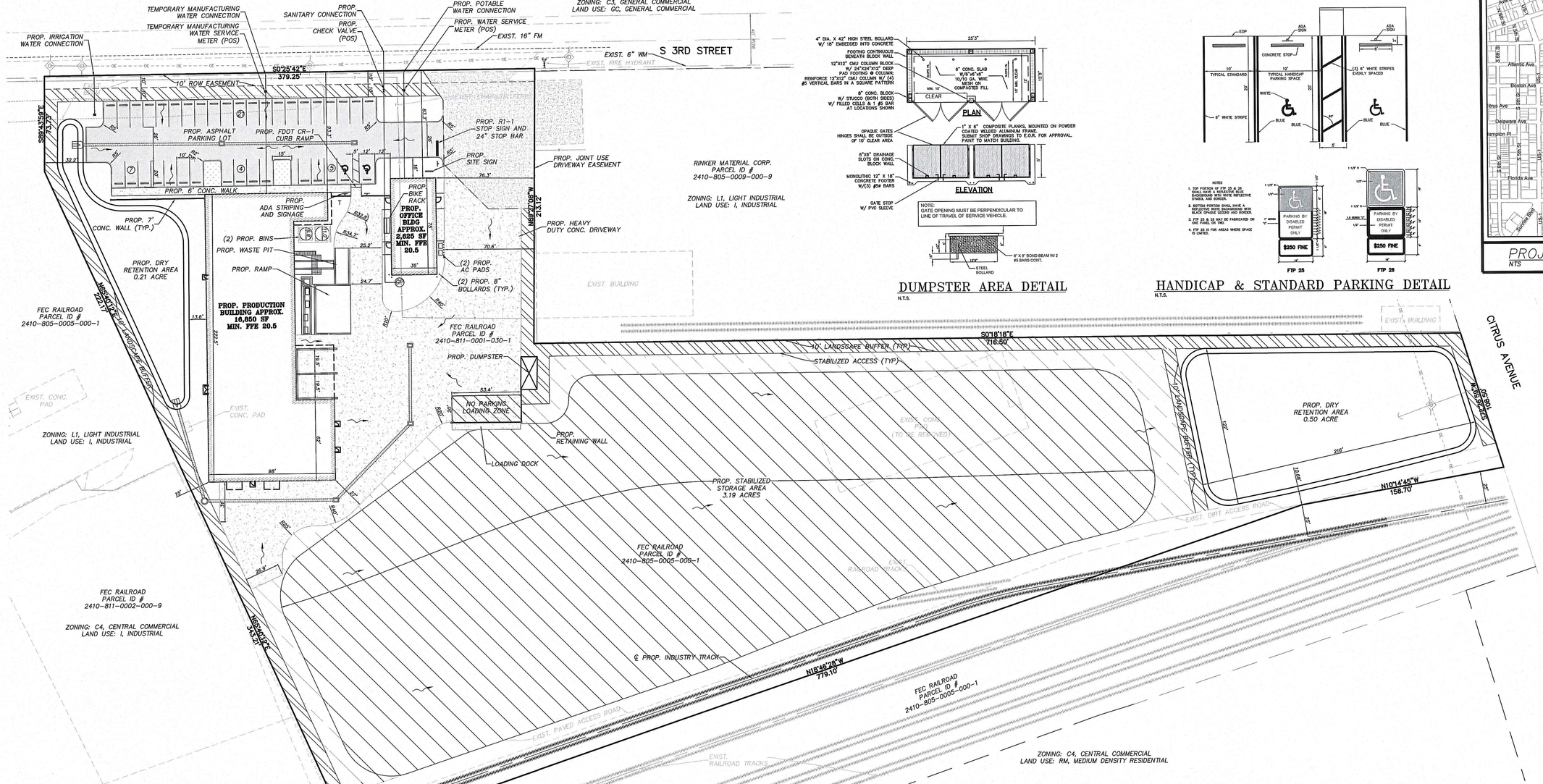
BOUNDARY, TOPOGRAPHIC & TREE SURVEY

PREPARED FOR

ROCLA CONCRETE TIE, INC.

DATE: 12-10-2014
HORIZ. SCALE: 1"=40'
VERT. SCALE: N\A
JOB No. 14-189
SHEET 1 OF 1

P:\Proj-2014\14-189 Rocla Crosstes, SKM\Survey\14-189 map2.dwg, 5/28/2015 9:42:03 AM

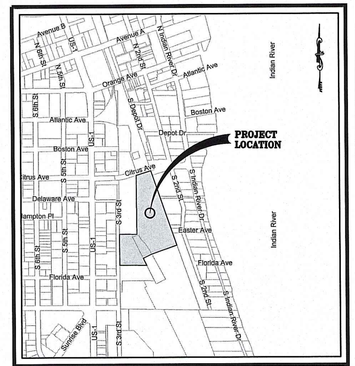


DUMPSTER AREA DETAIL

N.T.S.

HANDICAP & STANDARD PARKING DETAIL

N.T.S.



PROJECT LOCATION MAP

NTS

NORTH

GRAPHIC SCALE

40 0 20 40

(IN FEET)

1 inch = 40 ft.

SITE DATA TABLE

Owner/Applicant:
Rocla Concrete Tie, Inc.
1819 Denver West Drive, Suite 450
Lakewood, CO 80401
Phone: (303) 296-3500
www.roclatie.com

Engineer / Surveyor:
Culpepper & Terpening, Inc.
2980 South 25th. Street
Fort Pierce, FL 34981
Phone: (772) 464-3537
Fax: (772) 464-9497
www.ct-eng.com

Architect:
Edlund Dritenas Binkley Architects and Associates, P.A.
65 Royal Palm Point, Suite D
Vero Beach, FL 32960
Phone: (772) 569-4320

Owner's Representatives:
Culpepper & Terpening, Inc.
2980 South 25th. Street
Fort Pierce, FL 34981
Phone: (772) 464-3537
Fax: (772) 464-9497
www.ct-eng.com

Landscape Architect:
Boggs Planning & Landscape Architecture
100 Avenue A, Suite 2E
Fort Pierce, FL 34995
P (772) 486-5228
www.gbplans.com

Environmental:
Hobe Sound Enviromental
9512 S.E. Duncan St.
Hobe Sound, FL 33455
Phone: (772) 545-3676

1.) **Project Name:**
Rocla Crosstie Facility

2.) **Location:**
600 S. 3rd St. Fort Pierce, FL 34950

3.) **Project Description:**
Industrial facility for manufacturing of concrete crossties

4.) **Sec/Town/Range:**
Section 10/ Range 35S/ Township 40E

5.) **Map ID:**
24/10G

6.) **Parcel ID Numbers:**
2410-805-0005-000-1
2410-811-0001-030-1

7.) **Gross Site Area:**
7.18 acres (all above MHW)
312,686 sq feet (approximate)

8.) **Zoning:**

L1 - Light Industrial	7.18	ac

9.) **Land Use:**

I - Industrial	7.18	ac

10.) **Development Schedule:**

Start	1st Qtr 2015
Complete	4th Qtr 2015

11.) **Flood Zone:**
The project site is located in Flood Zone X.
According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Number 12111C0179J dated February 16, 2012.

12.) **Site Coverage:**

	acreage	sq feet	% of site
Buildings	0.45	19,475	6%
Roadways/Parking	1.22	53,175	17%
Other	0.37	16,226	5%
Open Space	1.47	63,951	20%
Laydown storage	2.95	128,587	41%
Dry Detention	0.72	31,272	10%
Totals	7.18	312,686	100%

(all areas are approximate and are subject to change as part of final construction designs.)

13.) **Building Hgt.:**

Maximum Bldg. Hgt.	38'
Storage Bin Hgt.	45'-7"

14.) **Building Setback:**
Required: 15' (For portions of property abutting public ROW or non- industrial district.)
Provided: 15'

15.) **Utility Service:**

Water Service	Ft. Pierce	Electric Service	FPL
Sewage Service	Ft. Pierce	Cable Service	Comcast
Re-Use Water	n/a		

16.) **Refuse Collection:**
Trash and solid waste is collected at central pick-up location.

17.) **Parking Required:**
16,950 sf @ 1 space per 600 gross sf = 28 spaces
2,625 SF @ 1 space per 300 sf = 9 spaces

Parking Required	Parking Provided:	
37	full size	34
	motorcycle	1
	handicap	2

Areas in L1 or L2 zone shall only be required to have at least on square foot of interior landscaping for each thirty (30) square feet of vehicular use.

Vehicular Use sf	Required Interior Landscape sf	Provided Interior Landscape sf
15,466	516	597

18.) **Site Drainage (preliminary):**
The stormwater management system will consist of overland flow discharging into an on-site retention system where both water quality and storm attenuation will be provided. The 100 year storm event will be retained on-site and there will be no off-site discharge from the property to the City's drainage system. Pavement elevations will be set in accordance with S.F.W.M.D. criteria, the 10 year, 1 day storm event.

19.) **Traffic Statement**
Please refer to the traffic report for the analysis of possible impact from the operation of the manufacturing facility. A summary of the result of the analysis are listed below.
ADT = 112 trips/day
Peak Hour of Operation = 24 trips

20) **Hours of Operation**
The manufacturing plant will be run on two (2) shifts, with the first shift running from 7am - 4pm and the second shift running from 7pm - 3am.

21) **Noise Level**
Noise leve at the property line will be 70 dB or less.

22) **CITY OF FORT PIERCE NOTES**
A. Project must comply with Chapter17 & Chapter 22 & Article XII per City of Ft. Pierce Code.
B. Parking space striping shall conform to Sections 22-60(C)(8) of the Ft. Pierce Code.

LEGEND

- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROPOSED STABILIZED ACCESS
- PROPOSED STORAGE AREA
- PROPOSED LANDSCAPE BUFFER
- PROPOSED ASPHALT
- OVERLAND FLOW DIRECTION
- PROPOSED WHEEL STOP
- T PROPOSED TRANSFORMER
- OE EXIST. OVERHEAD UTILITIES
- X EXIST. FENCE
- PROPERTY LINE
- CENTER LINE
- PROP. JOINT USE EASEMENT
- EXIST. RAILROAD TRACKS
- PROP. RAILROAD TRACKS
- PROP. 7' WALL

STEFAN KARL MATTHES LICENSE No 38723 STATE OF FLORIDA PROFESSIONAL ENGINEER

STEFAN K. MATTHES, P.E. No. 38723

NOTES:
1) ALL ELEVATIONS AND BENCHMARKS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) OF 1988.

COMPUTER FILE REF.	FIELD BK./PG.
14-189 base.dwg	

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STATE OF FLORIDA CERTIFICATION No. LB 4286

- REVISIONS -	BY	DATE
REVISED PER CFP TRC COMMENTS	JK	05-18-15

	BY	DATE
FIELD		
CALCS.		
DRAWN	JK	12-15-14
DETAILED		
CHECKED	SKM	05-18-15
APPROVED		

SITE PLAN

ROCLA CROSSTIE FACILITY

DATE: 05-28-2015
HORIZ. SCALE: 1"=40'
VERT. SCALE: N\A
JOB No. 14-189
SHEET 1 OF 1



FOLLANSBEE STEEL SIDING:
AEGEAN BLUE



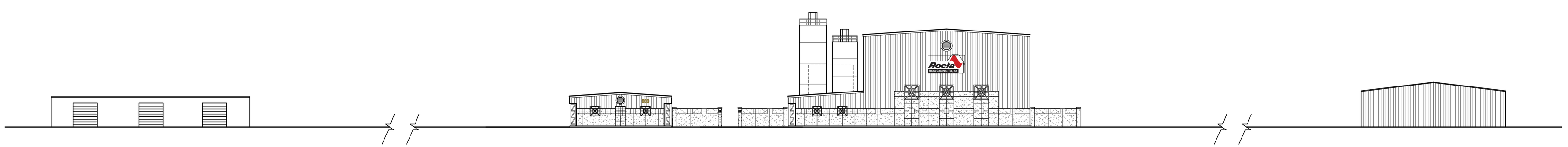
PPG PAINTS: STONINGTON
416-4



PPG PAINTS: MOUNTAIN GRAY
416-1



RENDERED ELEVATION
SCALE: 1/8" = 1'-0"



SITE CONTEXT ELEVATION
SCALE: 1" = 20'

EDLUND · DRITENBAS · BINKLEY
ARCHITECTS AND ASSOCIATES, P.A.
AR-AA C000888
65 ROYAL PALM POINTE, SUITE "D"
VERO BEACH, FLORIDA 32960
PHONE: (772) 569-4320

SEAL:

PROJECT: ROCLA TIE PLANT

FOR: ROCLA CONCRETE TIE, INC.
600 SOUTH 3RD STREET
FORT PIERCE, FL. 34950

NO:	DATE	REVISIONS

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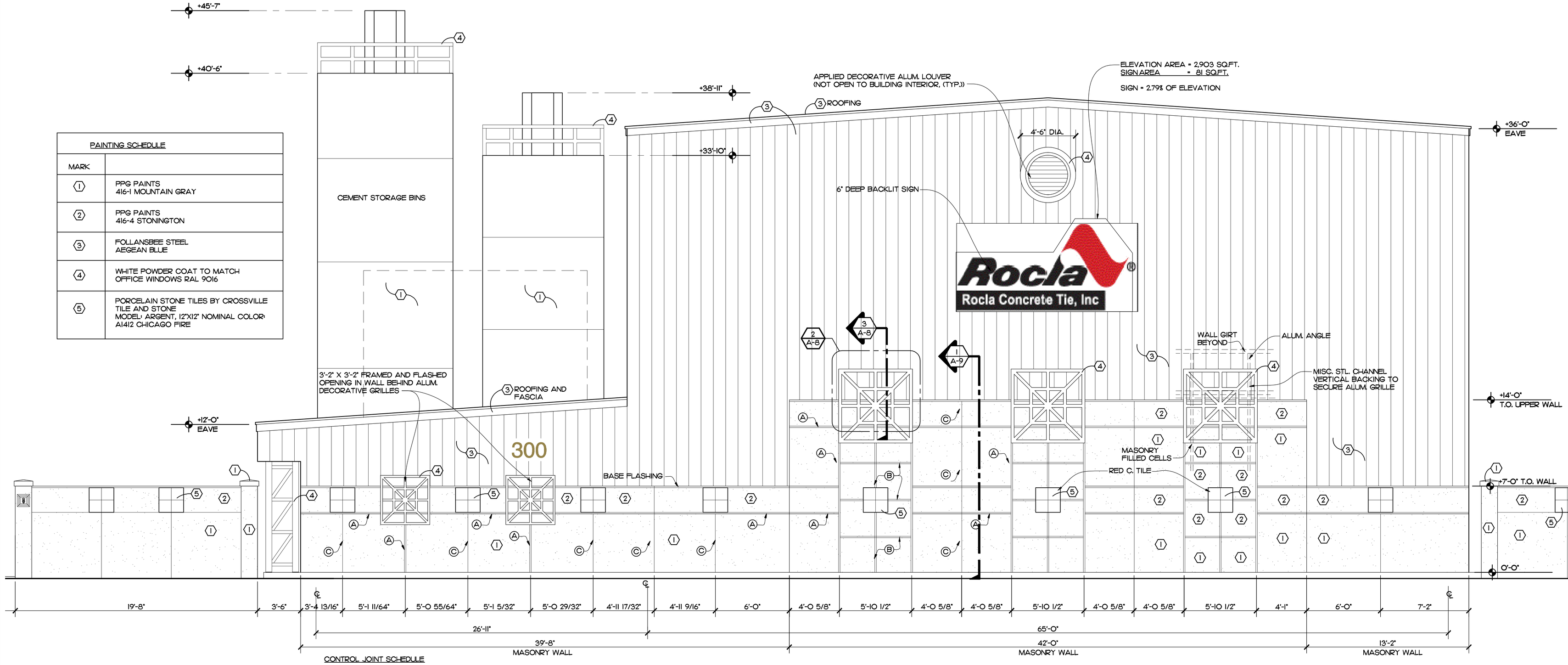
COMM. NO: 1102141B
DATE: 24 MAR '15
BY: AD
CH'KD: PD

SHEET NO.
DR-2
OF TWO

PAINTING SCHEDULE	
MARK	
1	PPG PAINTS 416-1 MOUNTAIN GRAY
2	PPG PAINTS 416-4 STONINGTON
3	FOLLANSBEE STEEL AEGEAN BLUE
4	WHITE POWDER COAT TO MATCH OFFICE WINDOWS RAL 9016
5	PORCELAIN STONE TILES BY CROSSVILLE TILE AND STONE MODEL: ARGENT, 12"X12" NOMINAL COLOR: A1412 CHICAGO FIRE

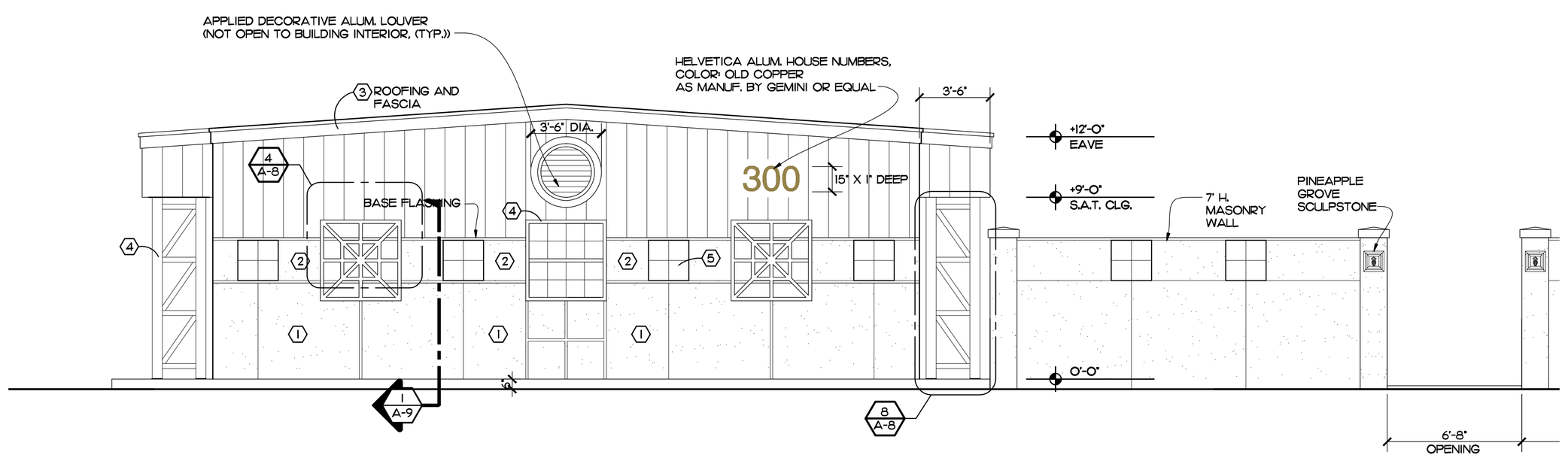


CONTROL JOINT SCHEDULE

- (A) VINYL CORP SLIP JOINT EXPANSION JOINT W/ 1 ½" REVEAL #4058-150 W/ ⅝" GROUND
- (B) VINYL CORP CHANNEL REVEAL #CS58-150 W/ 1 ½" REVEAL W/ ⅝" GROUND
- (C) VINYL CORP CONTROL JOINT #1558X W/ ⅝" GROUND AND REMOVABLE TAPE

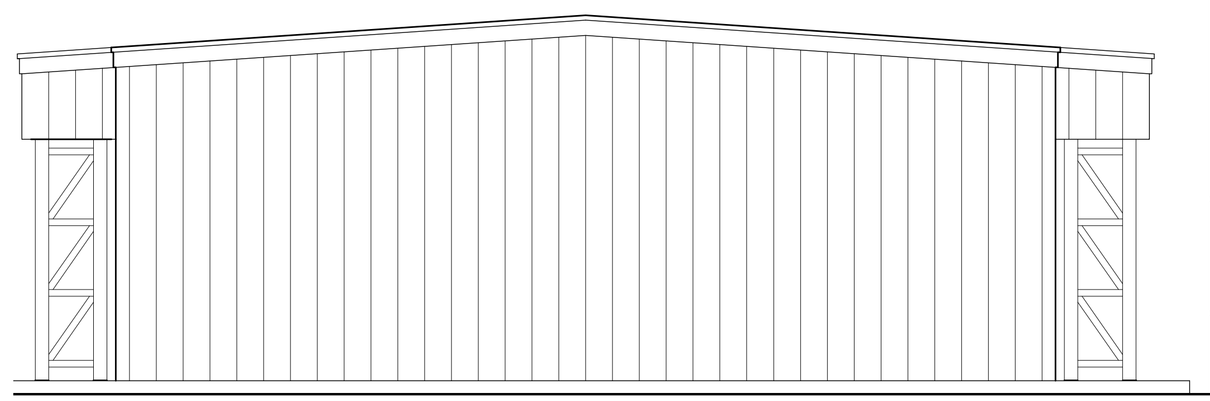
WEST ELEVATION - PLANT

SCALE: 1/4" = 1'-0"



WEST ELEVATION - OFFICE

SCALE: 1/4" = 1'-0"



EAST ELEVATION - OFFICE

SCALE: 1/4" = 1'-0"

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PHONE: (772) 569-4320

SEAL:

PROJECT: ROCLA TIE PLANT

FOR: ROCLA CONCRETE TIE, INC.
600 SOUTH 3RD STREET
FORT PIERCE, FL. 34950

NO:	DATE	REVISIONS

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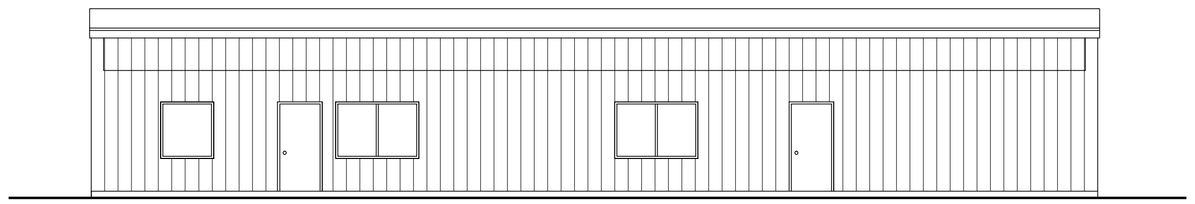
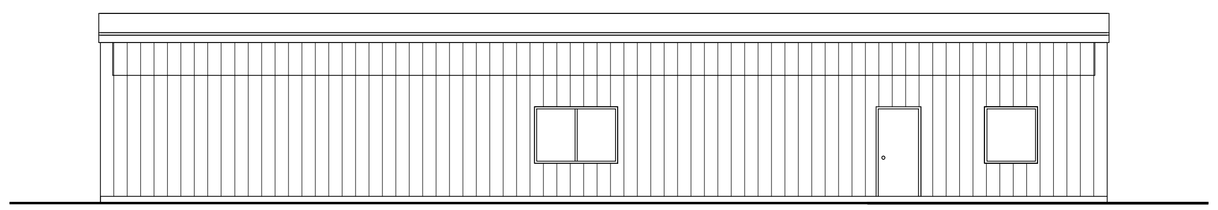
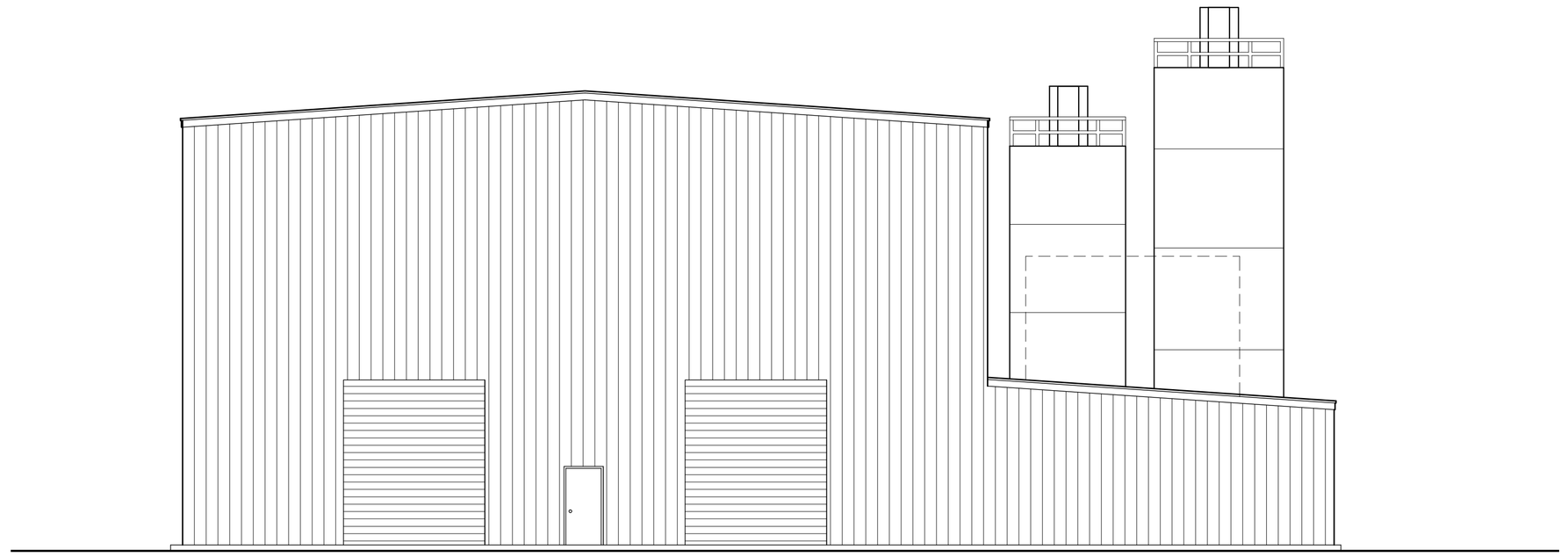


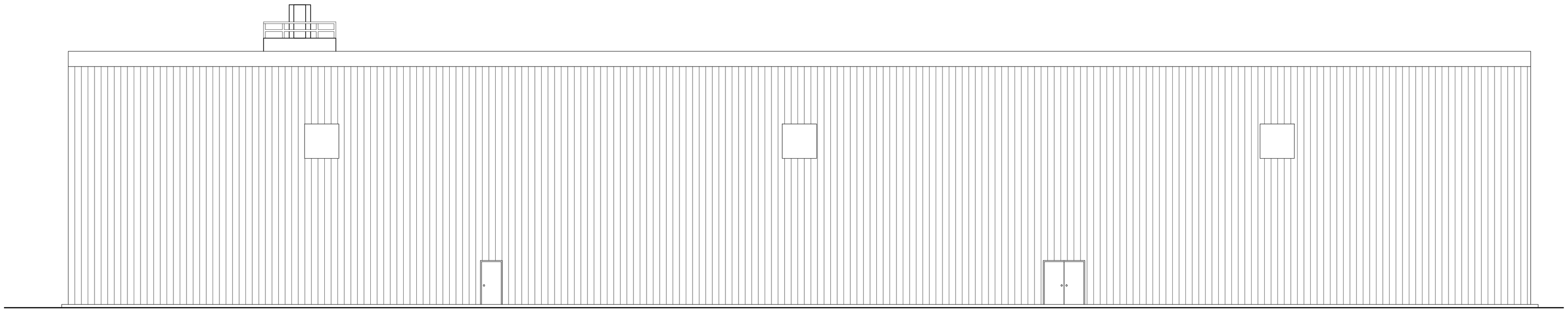
SOUTH ELEVATION - OFFICE
SCALE: 1/8" = 1'-0"



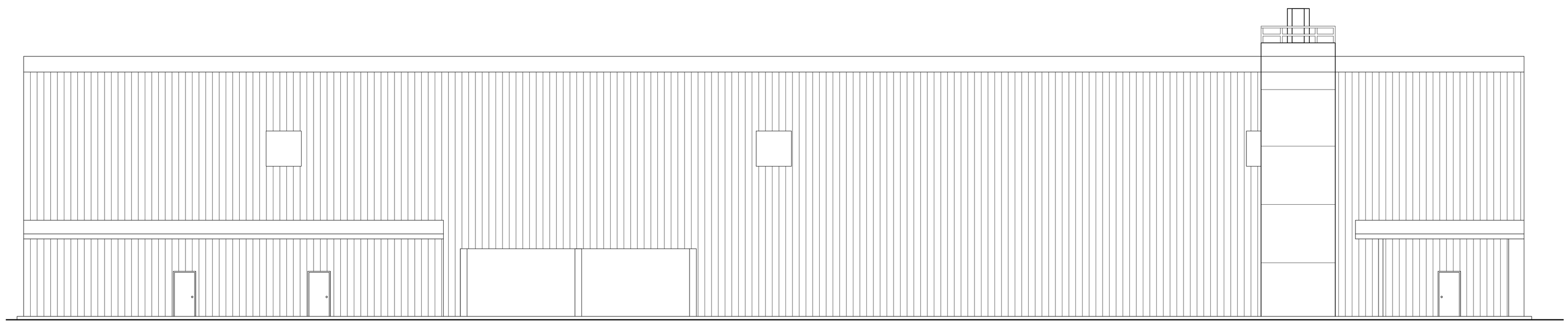
NORTH ELEVATION - OFFICE
SCALE: 1/8" = 1'-0"



EAST ELEVATION - PLANT
SCALE: 1/8" = 1'-0"



SOUTH ELEVATION - PLANT
SCALE: 1/8" = 1'-0"



NORTH ELEVATION - OFFICE
SCALE: 1/8" = 1'-0"

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A-4
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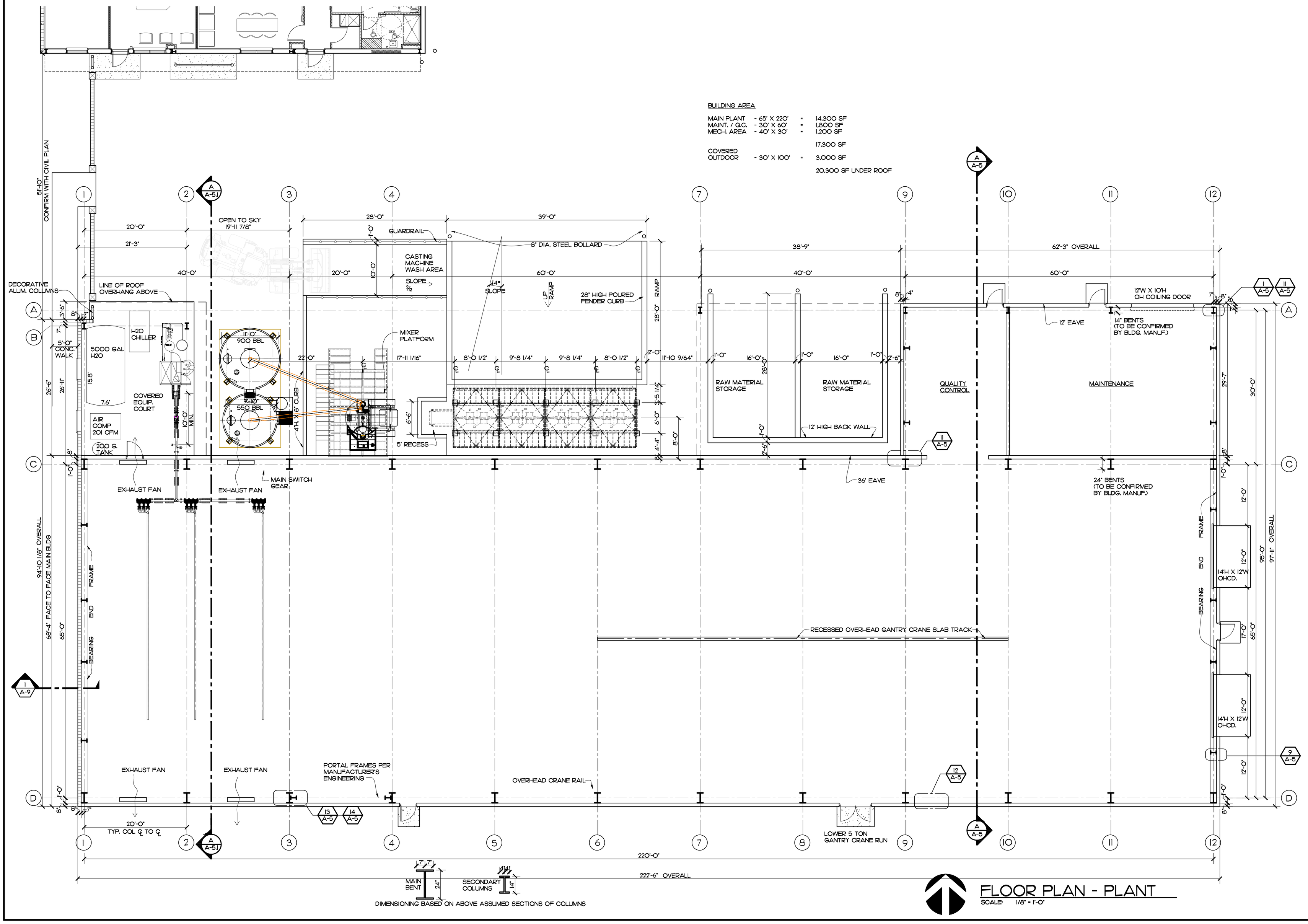

FLOOR PLAN - PLANT

SCALE: 1/8" = 1'-0"

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BY: AD
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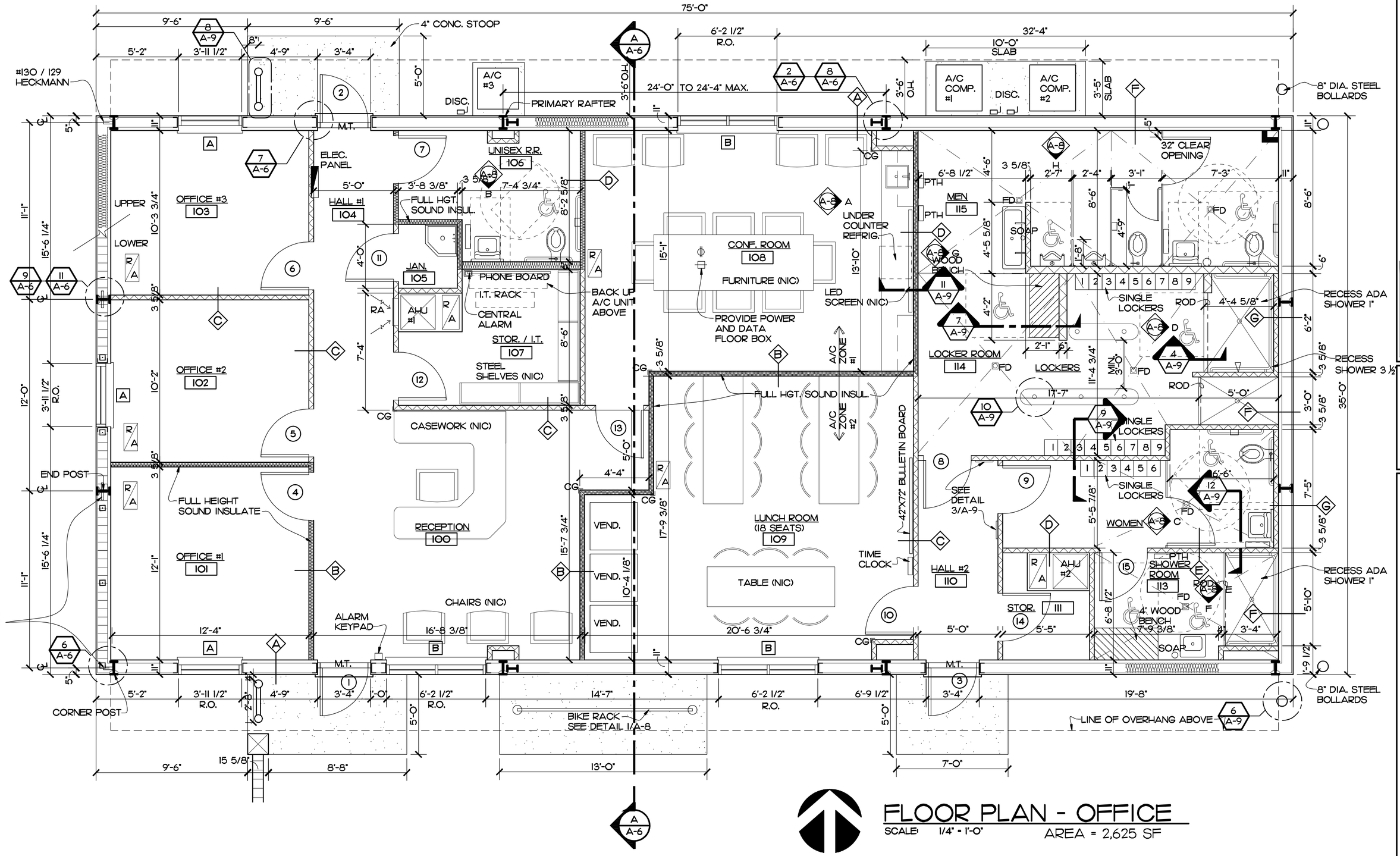
SHEET NO.
A-1
OF NINE

ROOM FINISH SCHEDULE

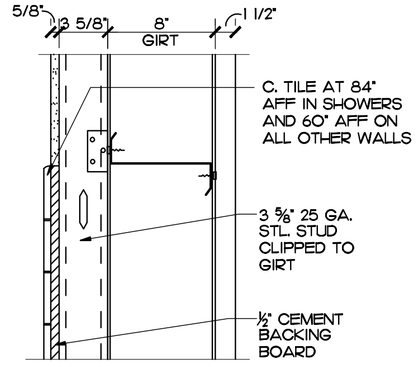
ROOM/SPACE		FLOOR	BASE	SILLS	WALLS	CEILING	CLG. HGT.	REMARKS
RECEPTION	100	PORCEL. TILE	ROLL STOCK VINYL	MARBLE AT WINDOWS	5/8" GYP. PAINT	S.A.T. PER RCP		
OFFICE #1	101	PORCEL. TILE	ROLL STOCK VINYL	MARBLE AT WINDOWS	5/8" GYP. PAINT	S.A.T. PER RCP		
OFFICE #2	102	PORCEL. TILE	ROLL STOCK VINYL	MARBLE AT WINDOWS	5/8" GYP. PAINT	S.A.T. PER RCP		
OFFICE #3	103	PORCEL. TILE	ROLL STOCK VINYL	MARBLE AT WINDOWS	5/8" GYP. PAINT	S.A.T. PER RCP		
HALL #1	104	PORCEL. TILE	ROLL STOCK VINYL	N/A	5/8" GYP. PAINT	S.A.T. PER RCP		
JAN.	105	PORCEL. TILE	ROLL STOCK VINYL	N/A	5/8" GYP. PAINT	S.A.T. PER RCP		PROVIDE 1/4" FRP TO 48" H. X FULL WALL WIDTH BEHIND MOP SINK
UNISEX R.R.	106	PORCEL. TILE	C.TILE COVE BASE	N/A	C.TILE TO 60" AFF	5/8" GYP.		3 1/2" 20 GA. STL. JOIST CEILING AT 16" O/C
STORAGE / I.T.	107	PORCEL. TILE	ROLL STOCK VINYL	N/A	5/8" GYP. PAINT	S.A.T. PER RCP		
CONF.	108	PORCEL. TILE	ROLL STOCK VINYL	MARBLE AT WINDOWS	5/8" GYP. PAINT	S.A.T. PER RCP		
LUNCH ROOM	109	PORCEL. TILE	ROLL STOCK VINYL	MARBLE AT WINDOWS	5/8" GYP. PAINT	S.A.T. PER RCP		
HALL #2	110	PORCEL. TILE	ROLL STOCK VINYL	N/A	5/8" GYP. PAINT	S.A.T. PER RCP		
STOR.	111	PORCEL. TILE	ROLL STOCK VINYL	N/A	5/8" GYP. PAINT	S.A.T. PER RCP		
WOMEN	112	PORCEL. TILE	C.TILE COVE BASE	N/A	C.TILE TO 60" AFF	MR 5/8" GYP.		1" SOLID PLASTIC BATH PARTITIONS
SHOWER ROOM	113	PORCEL. TILE	C.TILE COVE BASE	N/A	C.TILE TO 60" AFF	MR 5/8" GYP.		C.TILE IN SHOWER TO 84" AFF
LOCKER ROOM	114	PORCEL. TILE	C.TILE COVE BASE	N/A	C.TILE TO 60" AFF	MR 5/8" GYP.		
MEN	115	PORCEL. TILE	C.TILE COVE BASE	N/A	C.TILE TO 60" AFF	MR 5/8" GYP.		1" SOLID PLASTIC BATH PARTITIONS



HECKMANN ANCHORS #130 WELD-ON CHANNEL SLOT AND #129 CHANNEL SLOT TRIANGULAR TIE 5". APPLY AT EVERY 3RD COURSE OF BLOCK. WWW.HECKMANNANCHORS.COM

FLOOR PLAN - OFFICE

SCALE: 1/4" = 1'-0" AREA = 2,625 SF

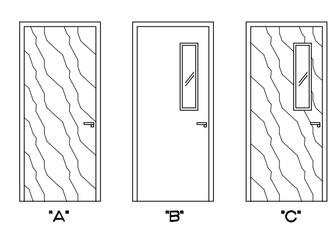


DETAIL G
SCALE: 1 1/2" = 1'-0"

WINDOW SCHEDULE

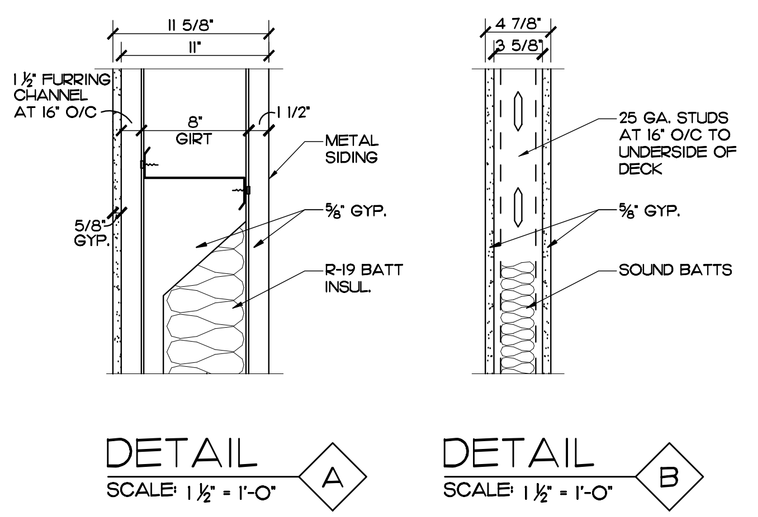
MARK	SIZE	MANUFACTURER	TYPE	DETAILS	SILL	REMARKS
A	48"W X 50 5/8"H. #4043	PGT WINGUARD, IMPACT RATED, SINGLE GLAZED, CLEAR	S.H. W/ FLANGE	W/ GRILLES	MARBLE	WHITE FACTORY FINISHED ALUM.
	(47 1/2"W. X 50 1/8"H. R.O.)					
B	PAIR 37"W. X 50 5/8"H. #24	PGT WINGUARD, IMPACT RATED, SINGLE GLAZED, CLEAR	S.H. W/ FLANGE	W/ GRILLES	MARBLE	WHITE FACTORY FINISHED ALUM.
	(74 1/2"W. X 50 1/8"H. R.O.)					

DOOR PROFILES



DOOR SCHEDULE

MARK	SIZE	DESCRIPTION	JAMB	DETAILS	REMARKS
1	3'-0" X 7'-0" X 1-3/4"	HOLLOW METAL DOOR AND FRAME, 8"X30" IMPACT GLASS, VISION PANEL	16 GA. DOOR AND JAMB	PROFILE 'B'	INSULATED DOOR, CLOSER, OFFICE SET DEAD BOLT, ADA METAL THRESHOLD
2	3'-0" X 7'-0" X 1-3/4"	HOLLOW METAL DOOR AND FRAME, 6"X30" IMPACT GLASS, VISION PANEL	16 GA. DOOR AND JAMB	PROFILE 'B'	INSULATED DOOR, CLOSER, OFFICE SET DEAD BOLT, ADA METAL THRESHOLD
3	3'-0" X 7'-0" X 1-3/4"	HOLLOW METAL DOOR AND FRAME, 8"X30" IMPACT GLASS, VISION PANEL	16 GA. DOOR AND JAMB	PROFILE 'B'	INSULATED DOOR, CLOSER, OFFICE SET DEAD BOLT, ADA METAL THRESHOLD
4	3'-0" X 7'-0" X 1-3/4"	S.C., WOOD, FLUSH, BIRCH FACED	16 GA. METAL JAMB	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, PRIVACY SET
5	3'-0" X 7'-0" X 1-3/4"	S.C., WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, PRIVACY SET
6	3'-0" X 7'-0" X 1-3/4"	S.C., WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, PRIVACY SET
7	3'-0" X 7'-0" X 1-3/4"	S.C., WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, PRIVACY SET
8	3'-0" X 7'-0" X 1-3/4"	S.C., WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, CLOSER, PUSH PLATE, PULL BAR, SS KICK PLATE
9	3'-0" X 7'-0" X 1-3/4"	S.C., WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, CLOSER, PUSH PLATE, PULL BAR, SS KICK PLATE
10	3'-0" X 7'-0" X 1-3/4"	S.C., WOOD, FLUSH, BIRCH FACED, 8" X 30" TEMP. VISION PANEL	"	PROFILE 'C'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, PASSAGE SET, SS KICK PLATE
11	3'-0" X 7'-0" X 1-3/4"	S.C. WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, STOREROOM SET
12	3'-0" X 7'-0" X 1-3/4"	S.C. WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, STOREROOM SET
13	3'-0" X 7'-0" X 1-3/4"	S.C. WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, PASSAGE SET
14	3'-0" X 7'-0" X 1-3/4"	S.C. WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, STOREROOM SET
15	3'-0" X 7'-0" X 1-3/4"	S.C. WOOD, FLUSH, BIRCH FACED	"	PROFILE 'A'	2 COATS CLEAR, SEMI-GLOSS POLYURETHANE, PRIVACY SET, SS COAT HOOK AT 48" AFF



DETAIL A — SCALE: 1 1/2" = 1'-0"

DETAIL B — SCALE: 1 1/2" = 1'-0"

DETAIL C — SCALE: 1 1/2" = 1'-0"

DETAIL D — SCALE: 1 1/2" = 1'-0"

DETAIL E — SCALE: 1 1/2" = 1'-0"

DETAIL F — SCALE: 1 1/2" = 1'-0"

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SEAL:

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600 SOUTH 3RD STREET
FORT PIERCE, FL 34950

NO:	DATE	REVISIONS

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SHEET NO.
A-2
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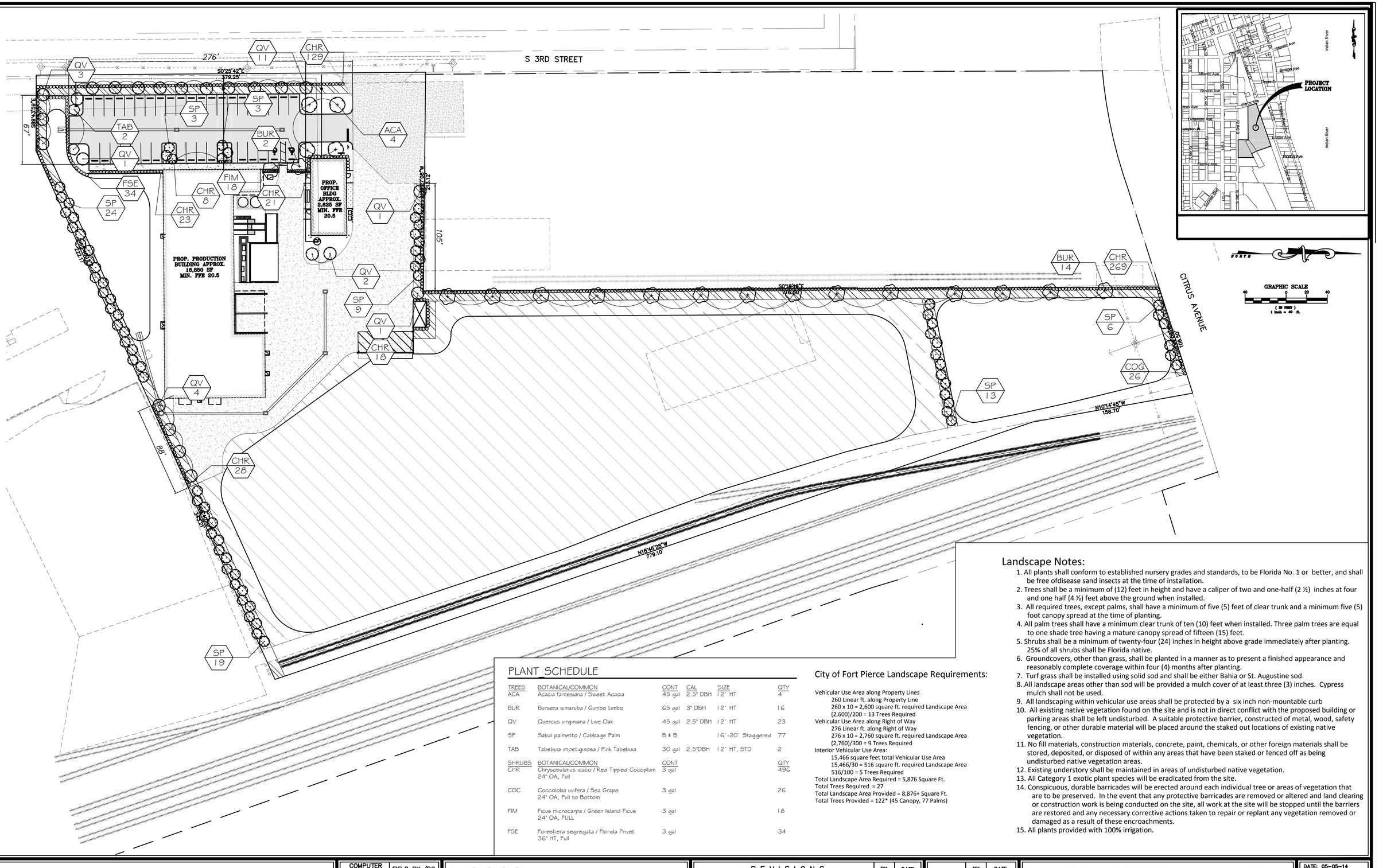
ROCLA TIE PLANT - AERIAL PERSPECTIVE



ROCLA TIE PLANT - US-1 PERSPECTIVE



PLANT SCHEDULE

TREES	BOTANICAL/COMMON	CONT	CAL	SIZE	QTY
ACA	Acacia farnesiana / Sweet Acacia	45 gal	2.5" DBH	12` HT	4
BUR	Bursera simaruba / Gumbo Limbo	65 gal	3" DBH	12` HT	16
QV	Quercus virginiana / Live Oak	45 gal	2.5" DBH	12` HT	23
SP	Sabal palmetto / Cabbage Palm	B & B		16`-20` Staggered	77
TAB	Tabebuia impetiginosa / Pink Tabebuia	30 gal	2.5"DBH	12` HT, STD	2
SHRUBS	**BOTANICAL/COMMON**	**CONT**			**QTY**
CHR	Chrysobalanus icaco / Red Tipped Cocoplum 24" OA, Full	3 gal			496
COC	Coccoloba uvifera / Sea Grape 24" OA, Full to Bottom	3 gal			26
FIM	Ficus microcarpa / Green Island Ficus 24" OA, FULL	3 gal			18
FSE	Forestiera segregata / Florida Privet 36" HT, Full	3 gal			34

City of Fort Pierce Landscape Requirements:

Vehicular Use Area along Property Lines
260 Linear ft. along Property Line
260 x 10 = 2,600 square ft. required Landscape Area
(2,600)/200 = 13 Trees Required
Vehicular Use Area along Right of Way
276 Linear ft. along Right of Way
276 x 10 = 2,760 square ft. required Landscape Area
(2,760)/300 = 9 Trees Required
Interior Vehicular Use Area:
15,466 square feet total Vehicular Use Area
15,466/30 = 516 square ft. required Landscape Area
516/100 = 5 Trees Required
Total Landscape Area Required = 5,876 Square Ft.
Total Trees Required = 27
Total Landscape Area Provided = 8,876+ Square Ft.
Total Trees Provided = 122* (45 Canopy, 77 Palms)

Landscape Notes:

1. All plants shall conform to established nursery grades and standards, to be Florida No. 1 or better, and shall be free ofdisease sand insects at the time of installation.
2. Trees shall be a minimum of (12) feet in height and have a caliper of two and one-half (2 ½) inches at four and one half (4 ½) feet above the ground when installed.
3. All required trees, except palms, shall have a minimum of five (5) feet of clear trunk and a minimum five (5) foot canopy spread at the time of planting.
4. All palm trees shall have a minimum clear trunk of ten (10) feet when installed. Three palm trees are equal to one shade tree having a mature canopy spread of fifteen (15) feet.
5. Shrubs shall be a minimum of twenty-four (24) inches in height above grade immediately after planting. 25% of all shrubs shall be Florida native.
6. Groundcovers, other than grass, shall be planted in a manner as to present a finished appearance and reasonably complete coverage within four (4) months after planting.
7. Turf grass shall be installed using solid sod and shall be either Bahia or St. Augustine sod.
8. All landscape areas other than sod will be provided a mulch cover of at least three (3) inches. Cypress mulch shall not be used.
9. All landscaping within vehicular use areas shall be protected by a six inch non-mountable curb
10. All existing native vegetation found on the site and is not in direct conflict with the proposed building or parking areas shall be left undisturbed. A suitable protective barrier, constructed of metal, wood, safety fencing, or other durable material will be placed around the staked out locations of existing native vegetation.
11. No fill materials, construction materials, concrete, paint, chemicals, or other foreign materials shall be stored, deposited, or disposed of within any areas that have been staked or fenced off as being undisturbed native vegetation areas.
12. Existing understory shall be maintained in areas of undisturbed native vegetation.
13. All Category 1 exotic plant species will be eradicated from the site.
14. Conspicuous, durable barricades will be erected around each individual tree or areas of vegetation that are to be preserved. In the event that any protective barricades are removed or altered and land clearing or construction work is being conducted on the site, all work at the site will be stopped until the barriers are restored and any necessary corrective actions taken to repair or replant any vegetation removed or damaged as a result of these encroachments.
15. All plants provided with 100% irrigation.

COMPUTER FILE REF.	FIELD BK./PG.

BOGGS
PLANNING + LANDSCAPE ARCHITECTURE
100 AVENUE A SUITE 2E
FORT PIERCE, FLORIDA 34950

– REVISIONS –	BY	DATE
REVISED PER STAFF COMMENTS	DMH	5-25-15

	BY	DATE
DRAWN	DMH	5-5-14
CHECKED	GB	5-7-14
APPROVED		

ROCLA CONCRETE TIE, INC

PRELIMINARY LANDSCAPE PLAN

DATE: 05-05-14
HORIZ. SCALE: 1"=40'
JOB No.
SHEET 1 OF 2

ROCLA CONCRETE TIES, INC.
SOUTH 3RD STREET

CITY OF FORT PIERCE, FLORIDA

Environmental Assessment
April 2015



Prepared for:
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NOTE: This Report, together with the concepts and design presented herein, as an instrument of service, is intended only for the specific purpose and Client for which it was prepared. Reuse of and improper reliance on this Report without written authorization and adaptation by Hobe Sound Environmental Consultants, Inc. shall be without liability to Hobe Sound Environmental Consultants, Inc.

ENVIRONMENTAL ASSESSMENT REPORT
ROCLA CONCRETE TIES, INC.

1.00 INTRODUCTION

The following Environmental Assessment Report of the Rocla Concrete Ties, Inc. project site has been prepared by Hobe Sound Environmental Consultants, Inc. (HSE). The project site consists of approximately 7.547 acres of land located south of Citrus Avenue, east of South 3rd Street, north of Florida Avenue and west of the Florida East Coast Railway tracks (Figures 1, 2 and 3 of 13). The project site is located at Latitude 27°26'30.923" and Longitude -80°19'25.462" in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

The purpose of this report is to provide the methodologies and findings of a scientific environmental assessment of the project site. This report addresses the following environmental issues: protected species, wildlife, vegetative communities, wetlands, soils, and topography. The report is based on field data collected on date(s).

2.00 AGENCY CONTACTS

HSE contacted, and is coordinating with, the following state and federal agencies: U.S. Fish and Wildlife Service (FWS), Florida Fish and Wildlife Conservation Commission (FFWCC), Florida Natural Areas Inventory (FNAI), and the State Historic Preservation Officer (SHPO) (Appendix A). An eagle locator map and National Wetlands Inventory (NWI) Map can be found as Figures 4 and 5 of 13.

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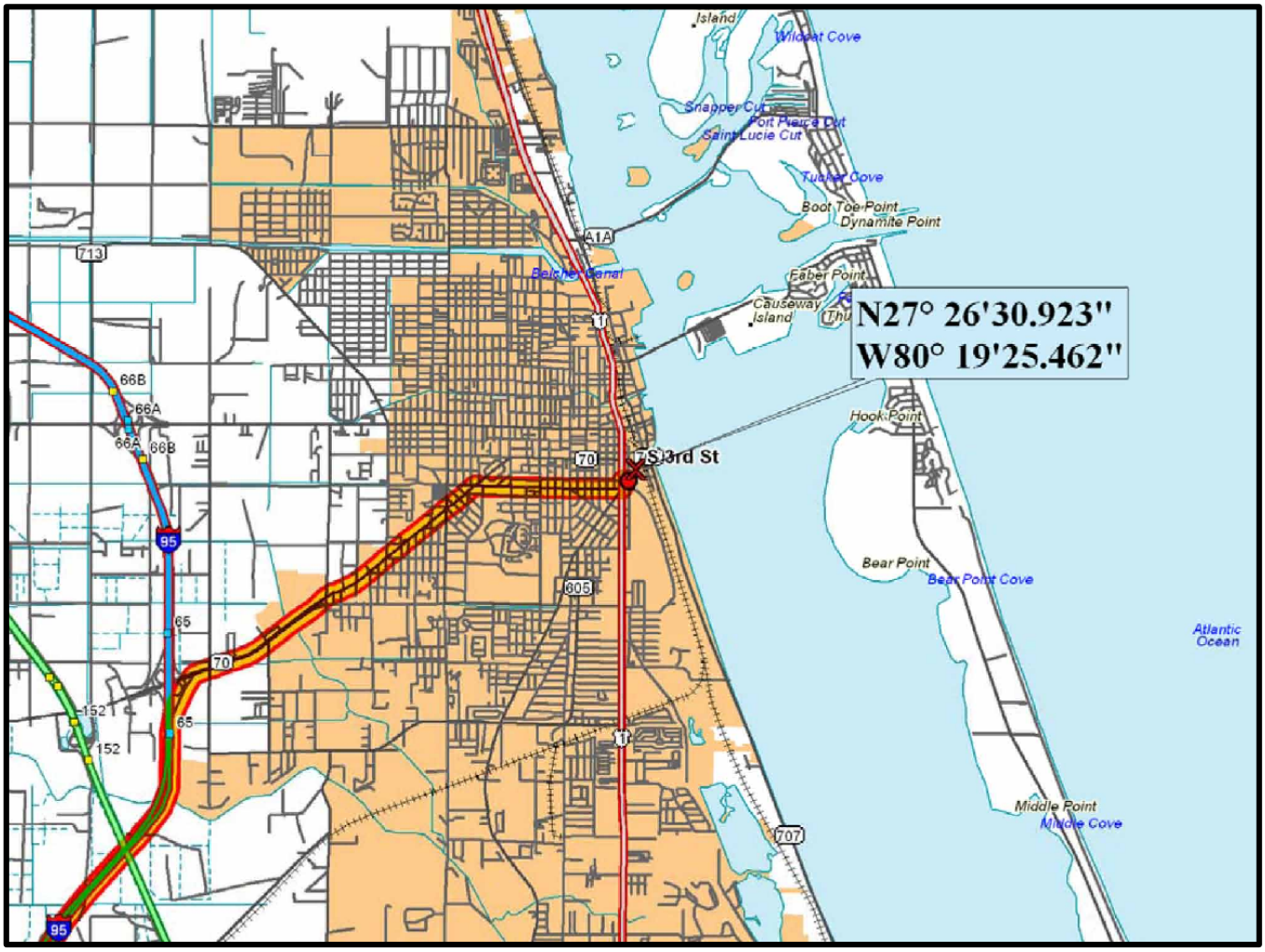
NOT A SURVEY

NORTH

0' 4000' 8000' 16000' 32000'

SCALE: 1" = 8000'



DIRECTIONS:

		Dist	Turn		Road	Near	Exit	Time	Total Dist
					I-95 S				
	in	0.00 mi	Start(N)		I-95 N			0:00:00	0.00 mi
	in	0.10 mi	Bear right(NNE)	on to	Okeechobee Rd Ramp			0:00:07	0.10 mi
	in	0.55 mi	Bear right(ENE)	on to	Okeechobee Rd			0:01:26	0.65 mi
	in	1.30 mi	Bear right(NE)	on to	SR 70 (Okeechobee Rd)			0:04:58	1.94 mi
	in	1.59 mi	Bear right(E)	on to	Georgia Ave			0:08:46	3.53 mi
	in	1.24 mi	Turn left(N)	on to	US 1 (S US 1|SR 5|S Federal Hwy|S 4...			0:10:53	4.77 mi
	in	0.07 mi	Turn right(E)	on to	Florida Ave			0:11:03	4.84 mi
	in	0.08 mi	Finish	at	Florida Ave			0:11:22	4.92 mi

Total Time: 0:11:22 Total Distance: 4.92 mi

SOURCE: DELORME STREET ATLAS USA,DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 01 - VICINITY MAP	DATE: 1 APRIL 2015	FIGURE: 1 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
VICINITY MAP

H S E
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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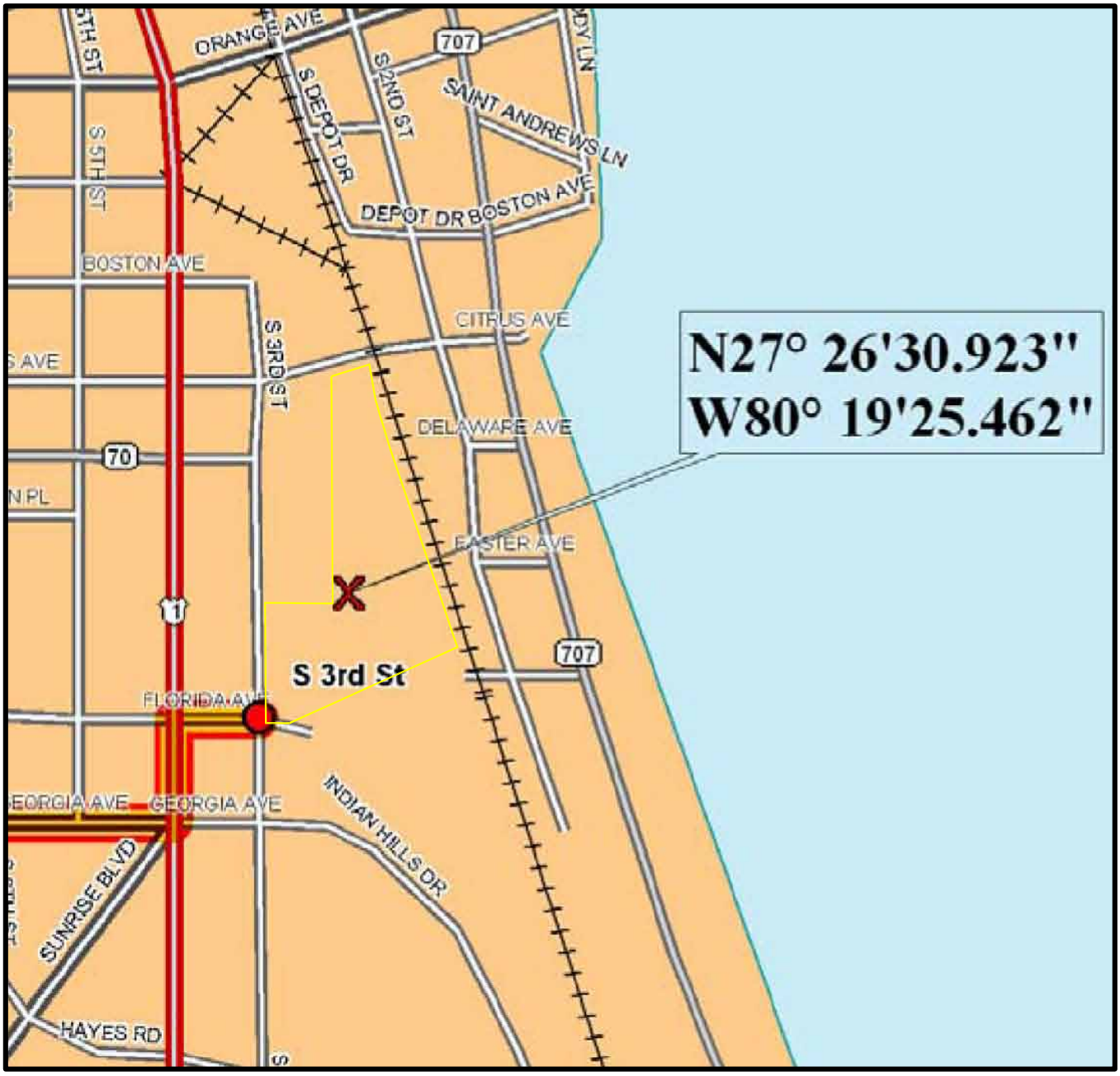
NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
LOCATION MAP

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



SOURCE:ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.

SOUTH 3rd STREET FORT PIERCE, FLORIDA

ENVIRONMENTAL ASSESSMENT (EA)

2014 AERIAL PHOTOGRAPH

HSE
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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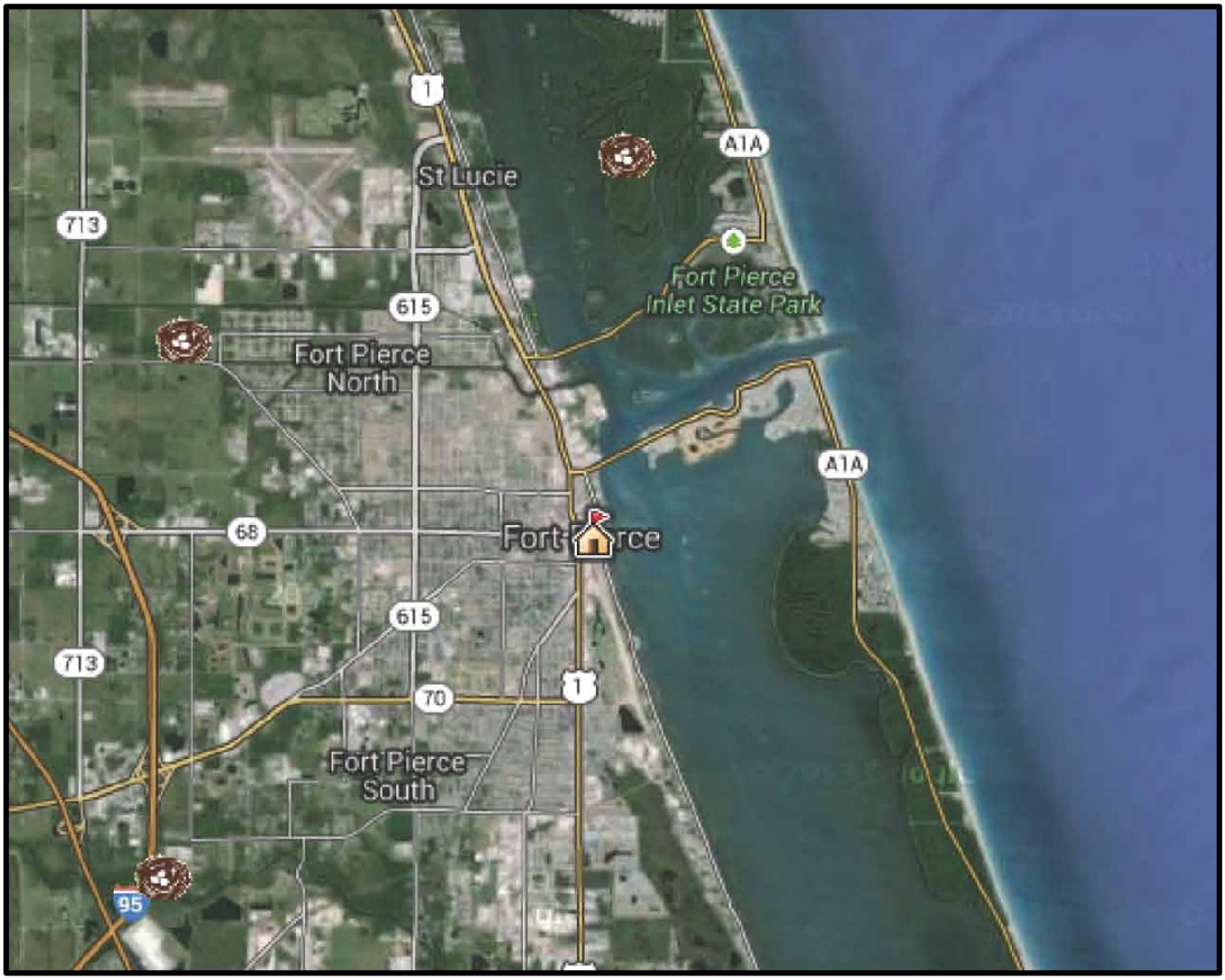
NOT A SURVEY

SCALE: 1" = N.T.S.

NORTH



BALD EAGLE NEST DATA SEARCH (5 MILE RADIUS) RESULTS

	Nest ID	County	Latitude	Longitude	Known Active	Last Survey	Distance
View History	SL006	St. Lucie	27 23.92	80 23.20	2012	2012	4.88
View History	SL011	St. Lucie	27 28.10	80 23.01	2012	2012	4.09
View History	SL014	St. Lucie	27 29.55	80 19.11	2012	2012	3.51

SOURCE:https://public.myfwc.com/FWRI/EagleNests/nestlocator.aspx

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 04 - EAGLE NEST.DWG	DATE: 1 APRIL 2015	FIGURE: 4 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
BALD EAGLE (Haliaeetus leucocephalus) LOCATIONS

H S E
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NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

SOURCE: http://www.fws.gov/wetlands/Data/Mapper.html

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 05 NWI .DWG	DATE: 1 APRIL 2015	FIGURE: 5 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
NATIONAL WETLANDS INVENTORY MAP

H S E
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3.00 METHODOLOGY

3.01 Gopher Tortoise and Other Burrow Commensals

3.01.1 Objective

Conduct a systematic survey to locate gopher tortoises (*Gopherus polyphemus*), Florida mouse (*Podomys floridanus*), eastern indigo snake (*Drymarchon corais couperi*), and Florida gopher frogs (*Rana areolata*) that may be present within the study area.

3.01.2 Methodology

Biologists followed the survey protocol as recommended in Ecology and Habitat Protection Needs of Gopher Tortoise (*Gopherus polyphemus*) Populations Found on Lands Slated for Large-scale Development in Florida; Non-game Wildlife Program, Technical Report #5, Florida Game and Fresh Water Fish Commission (FGFWFC), now known as FFWCC, Tallahassee, Florida, December 1987, and the Gopher Tortoise Permitting Guidelines, FFWCC, Tallahassee, Florida April 2008, revised February 2015.

- Biologists conducted parallel transects 10 meters (± 32 feet) apart (Figure 6 of 13).
- Biologists conducted serpentine search patterns between the parallel transects.
- All gopher tortoise burrows located were flagged as either potentially occupied or abandoned.
- All gopher tortoise burrows located were assigned an identification number and recorded.

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



SOURCE:2014 AERIAL PHOTOGRAPH ST. LUCIE COUNTY, FLORIDA AND HSE

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 06 - PED TRAN.DWG	DATE: 1 APRIL 2015	FIGURE: 6 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
PEDESTRAIN TRANSECT LOCATIONS

H S E
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- Biologists mapped all gopher tortoise burrows on a recent aerial photograph

- Additional data and notes were collected by biologists to determine potential or documented occurrences of the eastern indigo snake, Florida gopher frog, and Florida mouse.

3.02 Protected Species/Wildlife Survey

3.02.1 Objective

Conduct a systematic survey for flora and fauna that may occur on-site and note the presence of any protected species listed in *Florida's Endangered and Threatened Species,* Updated January 2013, FFWCC.

The state lists of animals are maintained by the FFWCC and categorized as endangered, threatened and species of special concern, in accordance with Rules 68A-27.003 (Endangered and Threatened) and 68A-27.005 (Species of Special Concern), Florida Administrative Code (F.A.C.). The state lists of plants are categorized into endangered, threatened, and commercially exploited, and are maintained by the Florida Department of Agriculture and Consumer Services (DOACS) via Chapter 5B-40, F.A.C. The state plant lists are statutorily designated via the Preservation of Native Flora of Florida Act (Title XXXV, Chapter 581,581.185-187. Florida Statutes).

The federal agencies that share the authority to list species as Endangered and Threatened are the National Oceanic and Atmospheric Administration-National Marine Fisheries Service (NOAA-NMFS) and the U.S. Fish and Wildlife Service (USFWS). The NOAA-NMFS is responsible for listing most marine species. The federal list of animals and plants is administered by the USFWS, and is published in 50 CFR 17.11 (wildlife) and 50 CFR17.12 (plants). Thge lists are categorized into

endangered species (E), threatened species (T), or endangered or threatened for similarity of appearance (E of T (S/A).

3.02.2 Methodology

Following are the methodologies biologists used to conduct the wildlife/protected species surveys.

3.02.2.1 ***Pedestrian Transects***

- Biologists conducted pedestrian transects throughout the project site on 31 March 2015 (Figure 6 of 13).
- The transects meandered through areas of suitable habitat.
- Biologists recorded and noted sightings, tracks, scat, tree markings, nests, cavities, and burrows.

3.03 Vegetation Survey (FLUCFCS)

3.03.1 Objective

To map vegetation on-site according to the *Florida Land Use, Cover and Forms Classification System* (FLUCFCS).

3.03.2 Methodology

Biologists used the following methodology to map vegetation found on the project site.

- Biologists used the *Florida Land Use, Cover and Forms Classification System* (FLUCFCS), September 1985, State of Florida Department of Transportation, State Topographic Bureau, Thematic Mapping Section.

- Biologists based vegetative community descriptions on field surveys, United States Department of Agriculture (USDA) Soil Conservation Service (SCS) soil maps, and aerial photograph interpretations.

- Numerical community designations were carried to Levels II or III, as determined to be appropriate, according to FLUCFCS.

3.04 Jurisdictional Wetlands

3.04.1 Objective

To identify and locate State of Florida (SFWMD) and Federal (COE) jurisdictional wetlands that may occur on the project site.

3.04.2 Methodology

Biologists used the following methodologies to locate State of Florida and Federal jurisdictional wetlands on-site.

- Biologists delineated wetlands according to Florida Administrative Code (FAC) 62-340.

- Biologists delineated wetlands according to the COE Wetland Delineation Manual, January 1987, Technical Report Y-87-1.

- Biologists flagged the wetlands with consecutively numbered flagging tape marked "Wetland Delineation".

- Biologists completed COE wetland delineation data sheets.

3.05 Soils

3.05.1 Objective

To identify project soil types according to the SCS.

3.05.2 Methodology

Biologists used the following methodology to identify soil types found on the project site.

- Project soils were mapped according to the *Soil Survey of St. Lucie County, Florida*, March 1980, United States Department of Agriculture, Soil Conservation Service (SCS).

3.06 Topography

3.06.1 Objective

To identify the topography of the project site.

3.06.2 Methodology

Biologists used the *U.S. Geological Survey (USGS) Topographic Map, Ankona Quadrangle, Florida 7.5 Minute Series* to determine site topography.

4.00 RESULTS

4.01 Gopher Tortoise and Other Burrow Commensals

One (1) potentially occupied gopher tortoise burrow was located by biologists during the gopher tortoise and commensal species survey (Figure 7 of 13). Biologists recorded the approximate GPS coordinates of the gopher tortoise burrow using a hand-held GPS unit. The gopher tortoise population for the project site was estimated using the following FFWCC formula:

Est. # gopher tortoises = # potentially occupied burrows x 0.50

The 0.50 factor in the equation is based on data collected and evaluated by the FFWCC, and is specific for the South Florida area. The estimated gopher tortoise population for the project site is one (1). Gopher tortoises are listed by the state as threatened and may also be listed by the USFWS in the near future as threatened.

Commensal species such as the eastern indigo snake and Florida gopher frog were not observed by biologists, however, they may occur on-site since suitable habitat exists on-site for these species. The Florida mouse was not observed on-site and no suitable habitat for this species exists on-site. The gopher frog is designated as a species of special concern (SSC) by the State of Florida. The eastern indigo snake is designated as threatened (T) by the State of Florida and the U.S. Fish and Wildlife Service. These species are protected under regulations set forth in the Wildlife Code of the State of Florida, Chapter 39 FAC, Rule 39-4.001 and 39-25.002, as well as Chapter 39-27.

Prior to site development, the Applicant must prepare an Eastern Indigo Snake Protection Plan and coordinate same with staff members of the FWS and FFWCC. The Eastern Indigo Snake Determination Key has been utilized in Section 4.02.1.1 below.

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'





ADULT MALE GOPHER TORTOISE (Gopherus polyphemus)

I HEREBY CERTIFY THAT:

A 100% SURVEY FOR GOPHER TORTOISES WAS CONDUCTED ON 31 MARCH 2015, ACCORDING TO FWC GUIDELINES. ONE (1) POTENTIALLY OCCUPIED GOPHER TORTOISE BURROW WAS LOCATED DURING THE SURVEY. THE ESTIMATED GOPHER TORTOISE POPULATION IS ONE (1).

ROBERT L. WEIGT, GTA-09-00153B

SOURCE:ST. LUCIE COUNTY 2014 AERIAL PHOTOGRAPH

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	07 - GT BURROW MAP.DWG	01 APRIL 2015	7 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"		DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.

SOUTH 3rd STREET FORT PIERCE, FLORIDA

ENVIRONMENTAL ASSESSMENT (EA)

GOPHER TORTOISE BURROW SURVEY

HSE
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

Per FFWCC guidelines, construction activities must not occur within a 25-foot radius of the mouth of a potentially occupied gopher tortoise burrow. If impacts are unavoidable, then the tortoises must be relocated to either an on-site or off-site preserve area. Relocation can be accomplished through the issuance of a FFWCC 10 or fewer burrows permit. Under this type of permit, tortoises can be relocated on-site, or off-site to a FFWCC approved gopher tortoise mitigation bank. A mitigation contribution paid directly to FFWCC is applicable a the rate outlined in the table below. Mitigation Bank fees range from $850.00 to over $1,000.00 per tortoise. Additional fees include preparation of the relocation permit on-ste meeting with FFWCC (if necessary), burrow excavation, preparation and transportation and after action report.

PERMIT TYPE	PERMIT DURATION	MITIGATION CONTRIBUTION
10 or fewer burrows *Tortoises are relocated on-site or off-site**	1 year	$203

* Gopher tortoises relocated off-site under a 10 or fewer burrows permit cannot be relocated to an unprotected recipient site.

4.02 Protected Species/Wildlife Survey

4.02.1 Protected Fauna

Various mammals, reptiles, and birds were observed on-site during the pedestrian transects. Wildlife species observed on-site during the pedestrian transects survey are listed in Table 1. The only protected species observed on-site was the gopher tortoise. Protected Species that potentially occur in St. Lucie County and may occur within the project site are listed in Table 2. Because there is potential habitat for the eastern indigo snake, the determination key has been utilized below

Although the site is within the core foraging area of one (1) wood stork colony (Figure 8 of 13), no wood storks were located on-site and there is no habitat

Table 1. Wildlife Observed on the Rocla Concrete Ties, Inc. Project Site During the Protected Species Survey.

A. Birds

Common Name	Scientific Name	Protected Species	
		State	Federal
Northern mockingbird	*Mimus polyglottos*	---	---

B. Mammals

Common Name	Scientific Name	Protected Species	
		State	Federal
Eastern cottontail rabbit	*Sylvilagus floridanus*	---	---
Nine-banded armadillo	*Dasypus novemcinctus*	---	---
Hispid cotton rat	*Sigmodon hispidus*	---	---

C. Reptiles

Common Name	Scientific Name	Protected Species	
		State	Federal
Brown anole	*Anolis sagrei*	---	---
Black racer	*Coluber constrictor constrictor*	---	---
Gopher tortoise	*Gopherus polyphemus*	SSC	---

Table 2. Rocla Concrete Ties, Inc. Project Site: Federal/State Listed Fauna and Flora Potentially Found in St. Lucie County, Florida.

A. Amphibians

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Gopher frog	*Rana areolata aesopus*	N	SSC	Yes	likely	not observed during preliminary pedestrian transects

B. Fish

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Mangrove rivulus	*Rivulus marmoratus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects

C. Reptiles

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
American alligator	*Alligator mississipiensis*	T(S/A)	SSC	No	not likely	not observed during preliminary pedestrian transects
Green turtle	*Chelonia myda*	E	E	No	not likely	not observed during preliminary pedestrian transects
Leatherback turtle	*Dermochelys coriacea*	E	E	No	not likely	not observed during preliminary pedestrian transects
Eastern indigo snake	*Drymarchon corais couperi*	T	T	Yes	likely	not observed during preliminary pedestrian transects
Hawksbill	*Eretmochelys imbricata*	E	E	No	not likely	not observed during preliminary pedestrian transects
Gopher tortoise	*Gopherus polyphemus*	N	SSC	Yes	observed	One (1) active gopher tortoise burrow located during preliminary pedestrian transects
Kemp's ridley	*Lepidochelys kempii*	E	E	No	not likely	not observed during preliminary pedestrian transects
Florida pine snake	*Pituophis melanoleucus mugitus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Loggerhead	*Caretta caretta*	T	T	No	not likely	not observed during preliminary pedestrian transects

Table 2: Continued.

D. Birds

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Florida scrub jay	*Aphelocoma coerulescens coerulescens*	T	T	No	not likely	not observed during preliminary pedestrian transects
Little blue heron	*Egretta caerulea*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Snowy egret	*Egretta thula*	T	SSC	No	not likely	not observed during preliminary pedestrian transects
Tri-colored heron	*Egretta tricolor*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
White ibis	*Eudocimus albus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Peregrine falcon	*Falco peregrinus*	E (S/A)	E	No	not likely	not observed during preliminary pedestrian transects
Bald eagle	*Haliaeetus leucocephalus*	T	T	No	not likely	not observed during preliminary pedestrian transects
Wood stork	*Mycteria americana*	E	E	No	not likely	not observed during preliminary pedestrian transect
Osprey	*Pandion haliaetus*	N	SSC*	No	not likely	not observed during preliminary pedestrian transects
Brown pelican	*Pelecanus occidentalis*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Snail kite	*Rostrhamus sociabilis plumbeus*	E	E	No	not likely	not observed during preliminary pedestrian transects
Black skimmer	*Rynchops niger*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Florida burrowing owl	*Speotyto cunicularia foridana*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Least tern	*Sterna antillarum*	N	T	No	not likely	not observed during preliminary pedestrian transects
Roseate spoonbill	*Ajaia ajaja*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Limpkin	*Aramus guarauna*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
Crested caracara	*Caracara plancus*	T	T	No	not likely	not observed during preliminary pedestrian transects
Piping plover	*Charadrius melodus*	T	T	No	not likely	not observed during preliminary pedestrian transects
Southern American kestrel	*Falco sparverius paulus*	N	T	No	not likely	not observed during preliminary pedestrian transects
Florida sandhill crane	*Grus canadensis pratensis*	N	T	No	not likely	not observed during preliminary pedestrian transects
American oystercatcher	*Haematopus palliatus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects

Table 2: Continued.

E. Mammals

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Southeastern beach mouse	*Peromyscus polionotus niveiventris*	T	T	No	not likely	not observed during preliminary pedestrian transects
Sherman's fox squirrel	*Sciurus niger shermani*	N	SSC	No	not likely	not observed during preliminary pedestrian transects
West Indian manatee	*Trichechus manatus*	E	E	No	not likely	not observed during preliminary pedestrian transects
Florida mouse	*Podomys floridanus*	N	SSC	No	not likely	not observed during preliminary pedestrian transects

F. Vascular Plants

COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS+	STATE STATUS++ (FLORIDA)	EXISTING HABITAT ON-SITE	LIKELIHOOD OF OCCURRENCE	NOTES
Curtiss' milkweed	*Asclepias curtissii*	N	E	No	not likely	not observed during preliminary pedestrian transects
Sand-dune spurge	*Chamaesyce cumulicola*	N	E	No	not likely	not observed during preliminary pedestrian transects
Piedmont jointgrass	*Coelorachis tuberculosa*	N	E	No	not likely	not observed during preliminary pedestrian transects
Large-flowered rosemary (scrub mint)	*Conradina grandiflora*	N	E	No	not likely	not observed during preliminary pedestrian transects
Lakela's mint	*Dicerandra immaculata*	E	E	No	not likely	not observed during preliminary pedestrian transects
Johnson's seagrass	*Halophila johnsonii*	PT	E	No	not likely	not observed during preliminary pedestrian transects
Fragrant prickly apple	*Harrisia fragrans*	E	N	No	not likely	not observed during preliminary pedestrian transects
Nodding pinweed	*Lechea cernua*	N	T	No	not likely	not observed during preliminary pedestrian transects
Burrowing four o'clock	*Okenia hypogaea*	N	E	No	not likely	not observed during preliminary pedestrian transects
Tiny polygala	*Polygala smallii*	E	E	No	not likely	not observed during preliminary pedestrian transects
Tampa vervain	*Glandularia tampensis*	N	E	No	not likely	not observed during preliminary pedestrian transects

Table 2: Continued.

Florida bear grass	*Nolina atopocarpa*	N	T	No	not likely	not observed during preliminary pedestrian transects
Terrestrial peperomia	*Pereromia humilis*	N	E	No	not likely	not observed during preliminary pedestrian transects
Blunt-leaved peperomia	*Peperomia obtusifolia*	N	E	No	not likely	not observed during preliminary pedestrian transects
Scentless vanilla	*Vanilla mexicana*	N	E	No	not likely	not observed during preliminary pedestrian transects

+Federal Status: U.S. Fish and Wildlife Service (FWS)

E	- Endangered
PE	- Proposed for Endangered
T	- Threatened
PT	- Proposed for Threatened
C	- Candidate for Endangered and/or Threatened
E (S/A)	- Endangered due to similarity of appearance
T (S/A)	- Threatened due to similarity of appearance
N	- Not currently listed

++State of Florida Status: Florida Fish and Wildlife Conservation Commission (FFWCC)

Animals:

E	- Endangered
T	- Threatened
SSC	- Species of Special Concern
N	- Not currently listed
SSC*	- Monroe County only

Plants:

E	- Endangered
T	- Threatened
N	- Not currently listed

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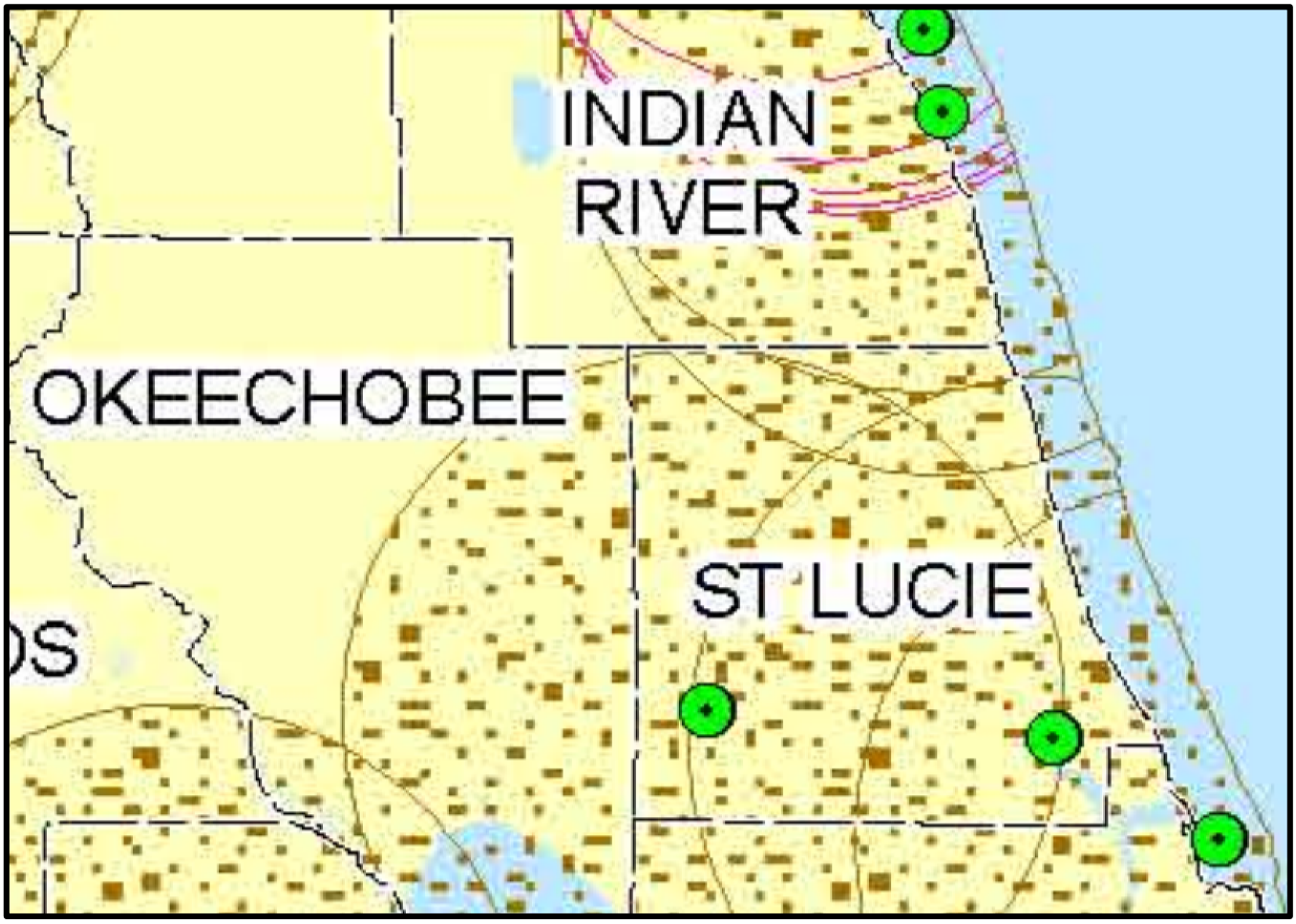
NOT A SURVEY

NORTH

0' 25000' 50000' 100000' 200000'

SCALE: 1" = 50000'



Wood Stork Nesting Colonies and Core Foraging Areas Active Within 2004-2013 in Florida

Foraging area active 2004-2013 (NFESO 6/8/2014):
- North buffer 13 miles
- Central buffer 15 miles
- South buffer 18.6 miles

WOOD STORK (Mycteria americana)

SOURCE:http://www.fws.gov/northflorida/woodstorks/Documents/20131211_Wood_stork_FL_nesting_colonies_map_update_2013.pdf

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	08 - WOOD STORK ROOKERIES.DWG	1 APRIL 2015	8 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
WOOD STORK NESTING COLONIES & CORE FORAGING AREAS

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

qon-site for this species. Additionally, although the site is within approximately 1.25 miles of Florida scrub-jay territory (Figure 9 of 13) there is no habitat on-site for this species.

4.02.1.1 Eastern Indigo Snake Programmatic Effect Determination Key

A. Project is not located in open water or salt marsh.....*go to* **B**

Project is located solely in open water of salt marsh..... **"***no effect"*

B. Permit will be conditioned for use of the Service's *Standard Protection Measures For The Eastern Indigo Snake* during site preparation and project construction.....*go to* **C**

Permit will not be conditioned as above for the eastern indigo snake, or it is not known whether an applicant intends to use these measures and consultation with the Service is requested[2].....may affect"

C. There are gopher tortoise burrows, holes, cavities or other refugia where a snake could be buried or trapped and injured during project activities.....*go to* **D**

There are no gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities.....*"NLAA"*

D. The project will impact less than 25 acres or xeric habitat supporting less that 25 active and inactive gopher tortoise burrows.....*Go to* **E**

The project will impact more that 25 acres of xeric habitat or more than 25 active and inactive gopher tortoise burrows and consultation with the Service is requested[2].....*"may affect"*

E. Any permit will be conditioned such that all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrow[3]. If an indigo snake is encountered, the snake mist be allowed to vacate the area prior to additional site manipulation in the vicinity. Any permit will also be conditioned such that holes, cavities, and snake refugia other than gopher tortoise burrows will be inspected

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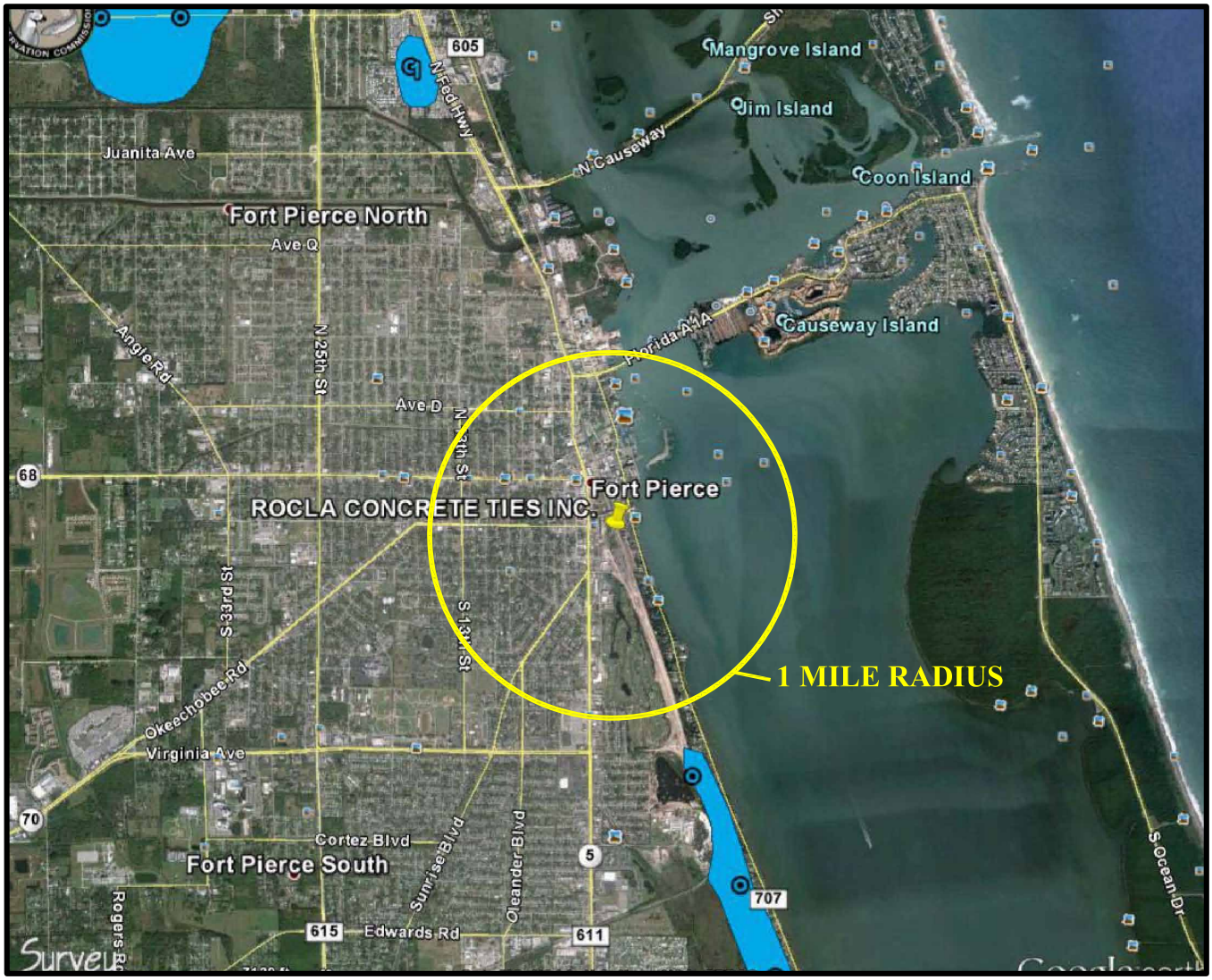
NOT A SURVEY

NORTH

0' 2500' 5000' 10000' 20000'

SCALE: 1" = 5000'



FLORIDA SCRUB-JAY (Aphelocoma coerulescens)

NO FLORIDA SCRUB-JAY HABITAT EXISTS ON-SITE.

SOURCE:http://atoll.floridamarine.org/Quickmaps/KMZ_download-habitats.htm

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 09 - SCRUB JAY.DWG	DATE: 1 APRIL 2015	FIGURE: 9 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
FLORIDA SCRUB-JAY LOCATIONS

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(772) 545-3676, E-mail: bobhsenv@gmail.com

each morning before planned site manipulation of a particular area, and, if occupied by an indigo snake, no work will commence until the snake has vacated the vicinity of proposed work..... *NLAA*

Permit will not be conditioned as outlined above and consultation with the Service is requested[2].....”*may affect*”

[1]With an outcome of “no effect” of “NLAA” as outlined in this key, the requirements of section 7 of the Act are fulfilled for the eastern indigo snake and no further action is required.

[2]Consultation may be concluded informally or formally depending on project impacts.

[3] If excavating potentially occupioed burrows, active or inactive, individuals must first obtain state authorization via a FWC Authorized Gopher Tortoise Agent permit. The excavation method selected should also minimize the potential for injury of an indigo snake. Applicants should follow the excavation guidance provided within the most current Gopher Tortoise Permitting Guidelines found at http://myfwc.com/gophertortoise.

The project, as proposed is not likely to adversely affect (NLAA) the eastern indigo snake. Prior to construction, eastern indigo snake and gopher tortoise protection/education signs will be posted at the each construction entrance to the site (Figure 10 of 13). Additionally, pamphlets for both of these species will be handed out prior to onset of construction to futher familiarize the contractors with what to do if they spot an eastern indigo snake or a gopher tortoise after initiation of construction activities.

4.02.2 Protected Flora

During the pedestrian transects survey, biologists did not observe any species of plants listed by the Florida Department of Agriculture (FDA) or the FFWCC. State and Federally listed flora that potentially exist in St. Lucie County and their likelihood of occurrence within the project site boundaries are listed in Table 2.

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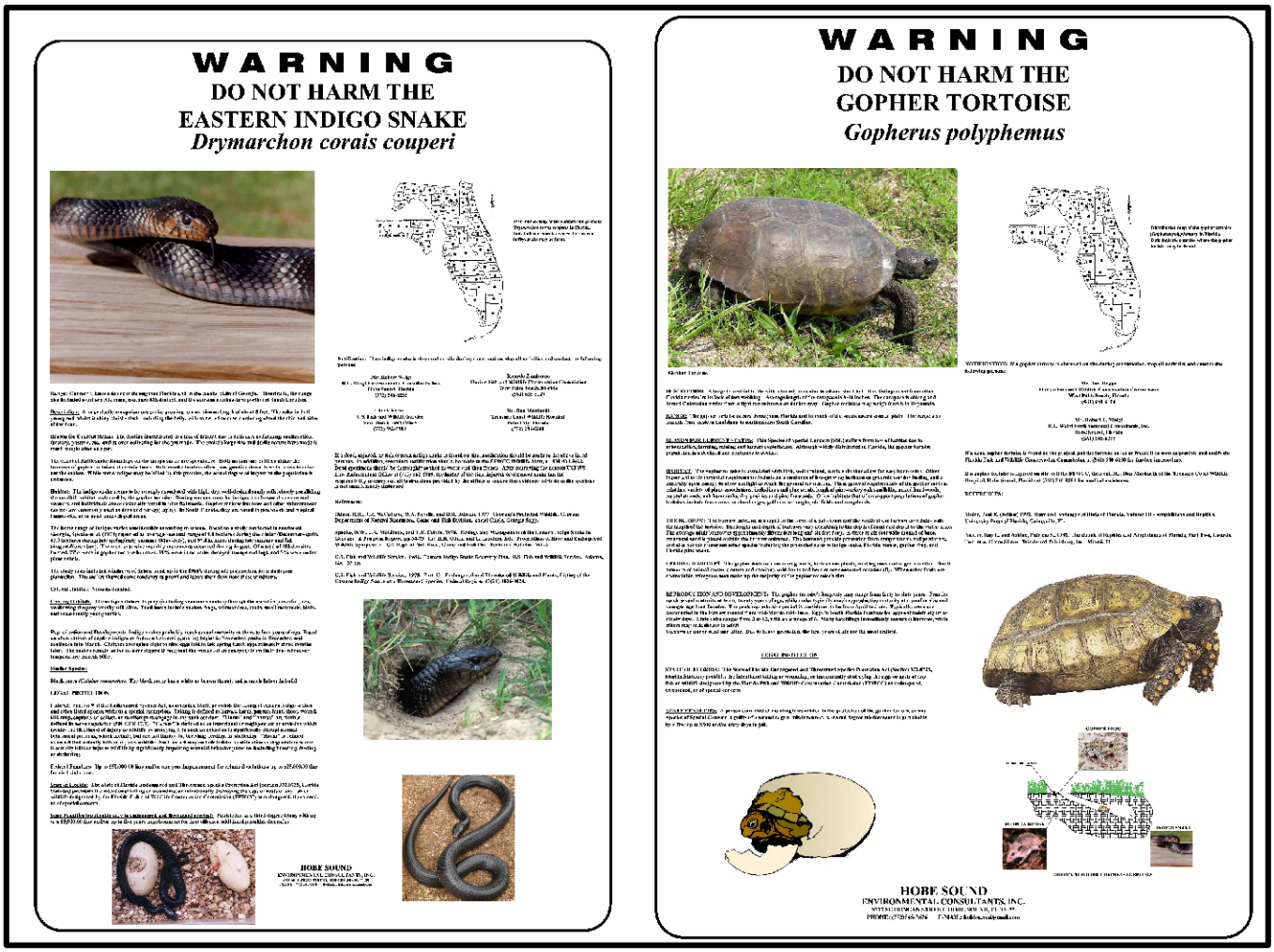
NOT A SURVEY



EASTERN INDIGO SNAKE AND GOPHER TORTOISE EDUCATIONAL POSTERS WILL BE POSTED DURING CONSTRUCTION.

AND

EASTERN INDIGO SNAKE AND GOPHER TORTOISE EDUCATIONAL PHAMPLETS WILL BE DISTRIBUTED TO THE CONSTRUCTION WORKERS .

SOURCE:HSE **PARCEL ID # 2410-805-0005-000-1**

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	10 - EIS GT PRO PLAN.DWG	1 APRIL 2015	10 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
EASTERN INDIGO SNAKE AND GOPHER TORTOISE PROTECTION PLAN

Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

4.03 Vegetation (FLUCFCS)

Vegetation cover types within the project site boundaries include upland and disturbed categories. Vegetation associations present on-site were mapped using Level II and Level III of FLUCFCS. The classifications used represent the closest facsimile possible to the natural community present. The FLUCFCS map is depicted in Figure 11 of 13. Photographs of the project site are provided in Appendix B.

4.03.1 Vegetation Associations

4.03.1.1 *150 - Industrial (+/-7.547 acres)*

This designation covers the entire site, part of which has been developed and part of which has been previously cleared and contains a great deal of debris from adjacent industrial sites. Vegetation includes occasional cabbage palm (*Sabal palmetto*), Brazilian pepper (*Schinus terebinthifolius*),tough bumelia (*Sideroxylon tenax*), grapevine (*Vitis rotundifolia*), bamboo vine (*Smilax* spp.), periwinkle (*Catharanthus roseus*), Virginia creeper (*Parthenocissus quinquefolia*), cogongrass (*Imperata cylindrica*), dog fennel (*Eupatorium capillifolium*), annual ragweed (*Ambrosia artemisiifolia*), prickly pear cactus (*Opuntia* sp.), chalky bluestem (*Andropogon capillipes*), wiregrass (*Aristida stricta*), tickseed (*Coreopsi*s sp.), rosary pea (*Abrus precatorius*), senna (*Cassia* sp.) and raspberry (*Rubus* sp.).

4.03.2 Tree Protection

The City of Fort Pierce Code of Ordinances (CFPCOO), Chapter 22, Article XII, Division 3, Section 22-192 states that no person shall, directly or indirectly, cut down, substantially alter, destroy, remove, relocate, damage or authorize any suich act involving a protected tree situated on land within the city, without first obtaining a tree removal permit. Protected vegetation includes all native vegetation. Section 22-194 states that all native trees, 14" or greater diameter at breast height (DBH), except for palms which have a minimum clear trunk of ten (10) feet shall be preserved and protected in accordance with this article. Mitigation is required for the

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



LEGEND

150 - INDUSTRIAL (7.54± ACRES)

SOURCE: LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM, HANDBOOK 1999 DEPARTMENT OF TRANSPORATION.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 11 - FLUCFCS MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 11 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
FLUCFCS (VEGETATION) MAP

H S E
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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

loss of any native trees, 14" or greater diameter at breast height (DBH), except for palms which have a minimum clear trunk of ten (10) feet. It is HSE's opinion that protected trees, comprising cabbage palm trees with over 10' clear trunk may occur on-site. Mitigation will be required for impacts to these cabbage palms.

4.04 Jurisdictional Wetlands

It is HSE's opinion that there are no (0) State (SFWMD) or Federal (USACE) jurisdictional wetlands on the project site.

4.05 Soils

The United States Department of Agriculture, SCS, has mapped the surficial soil types within the project site. The resulting soil delineations were published in the *Soil Survey of St. Lucie County Area, Florida*, March 1980. SCS soil types are mapped on Figure 12 of 13.

Detailed and complete descriptions of each of these soil communities are presented in the St. Lucie County Soil Survey, and therefore, are not included herein. However, a general description of the soils is included in Table 3. This table also represents estimated area of soil by types, physical properties, and degree of limitation of various soil types mapped, as excerpted from the SCS published data.

Soil types mapped by the SCS are generally limited to the upper 60 to 72 inches of the soil profile and are distinguished by several factors. These factors include soil drainage, topography, presence or absence of restrictive or clayey hardpan type soils, and the depth and range in fluctuation of the groundwater table associated with each soil type. SCS soil classifications are considered good early indicators and a reasonable database for a preliminary evaluation of the suitability of lands for certain uses.

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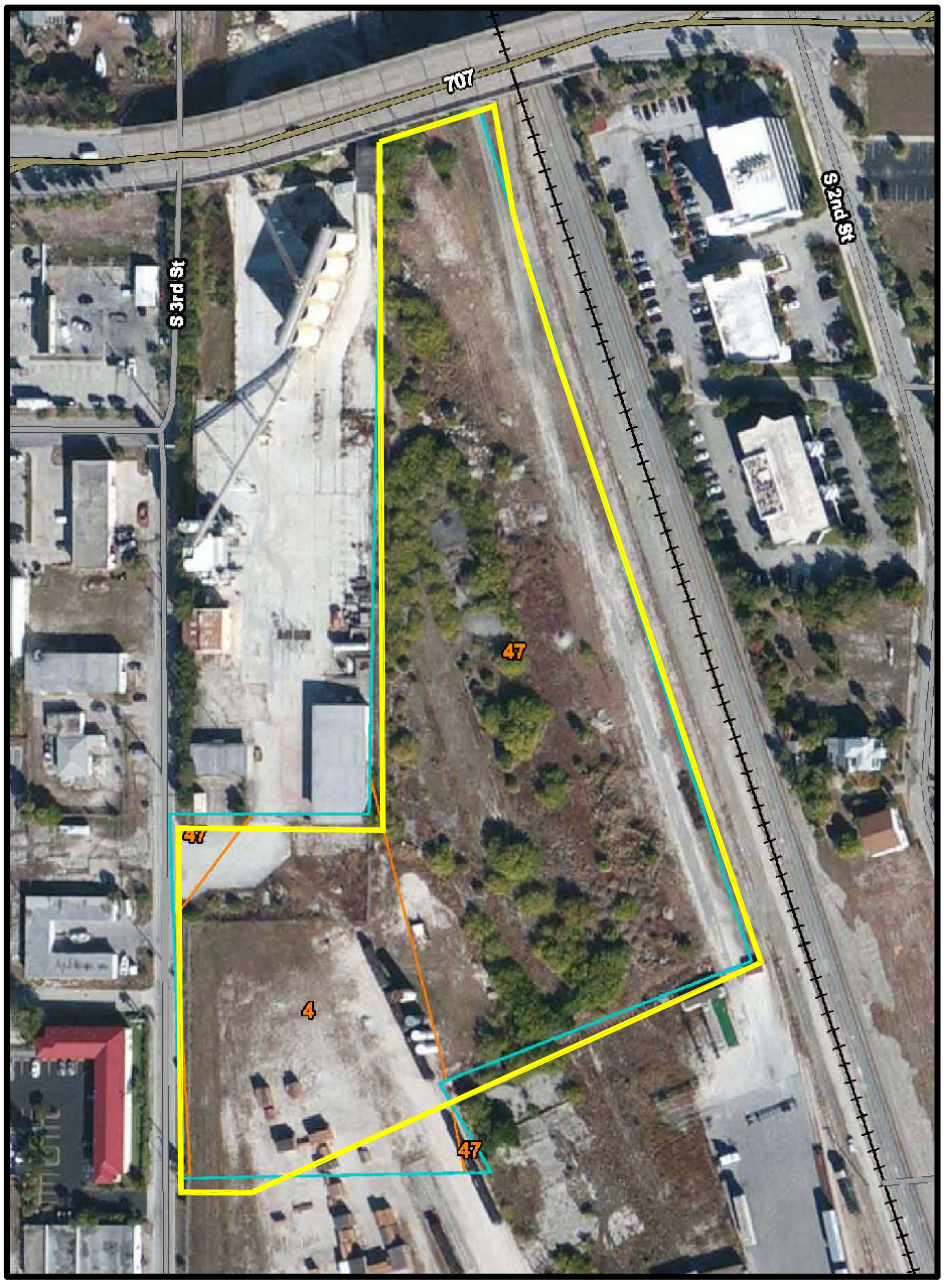
NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



LEGEND

4 - ARENTS, 0 TO 5 PERCENT SLOPES
47 - URBAN LAND

SOURCE: http://websoilsurvey.sc.egov.usda/App/WebSoilSurvey.aspx

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	12 - SCS SOIL MAP.DWG	1 APRIL 2015	12 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.

SOUTH 3rd STREET FORT PIERCE, FLORIDA

ENVIRONMENTAL ASSESSMENT (EA)

SCS SOIL MAP

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Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

Table 3. Soil Descriptions*.

Soil Name and Map Number	Brief Soil Description	Seasonal High Water Table		Permeability Rate		Degree and Kind of Limitation		Hydrologic Group
		Depth (ft.)	Duration (mos.)	Depth (in.)	Rate (in/hr)	Dwelling w/o basement	Aquifer fed excavated Ponds (water mgmt)	
Arents, 0-5% slopes (4)	This soil consists of soil material dug from several areas that have different kinds of soil.	---	---	---	---	---	---	---
Urban Land (47)	Urban land consists of areas that are more than 70% covered by airports, shoppiong centers, parking lots, large buildings, streets and sidewalks. The surface of these soils, to a depth of about 12 inches, has been covered wth fill material consisting of sandy and loamy materials which contain limestone and shell fragments in places. Urban land is not places in a cpability subclass.	---	---	---	---	---	---	---

*Source: U.S. Department of Agriculture, Soil Conservation Service, *Soil Survey of St. Lucie County Area, Florida*; March 1980.

4.06 Topography

According to the USGS Topographic Map, *Ankona Quadrangle, 7.5 Minute Series*, site elevation runs from approximately 20-25' NGVD. Figure 13 of 13 depicts the USGS Topographic Map for the project site.

4.07 Archaeological/Historical Review

HSE contacted the State Historical Preservation Officer (SHPO) to request that they review their files for any known historical and/or archaeological sites that may occur within the boundaries of the project site (Appendix A).

The Applicant has no knowledge of any historical and/or archaeological sites located within the project boundaries. During construction, if any historical and/or archaeological artifacts are recovered, work will cease and desist immediately, and the site will be coordinated with SHPO.

5.00 CONCLUSIONS

- One (1)potentially occupied gopher tortoise burrows was located on-site.
- The estimated gopher tortoise population for the project site is one (1).
- A relocation permit may be obtained from the FFWCC to relocate the gopher tortoise to an off-site preserve.
- The Florida mouse was not observed on-site during this survey, and suitable habitat does not exist on-site.
- The eastern indigo snake and Florida gopher frog were not observed on-site during this environmental survey; however, habitat for these species does exist on-site.

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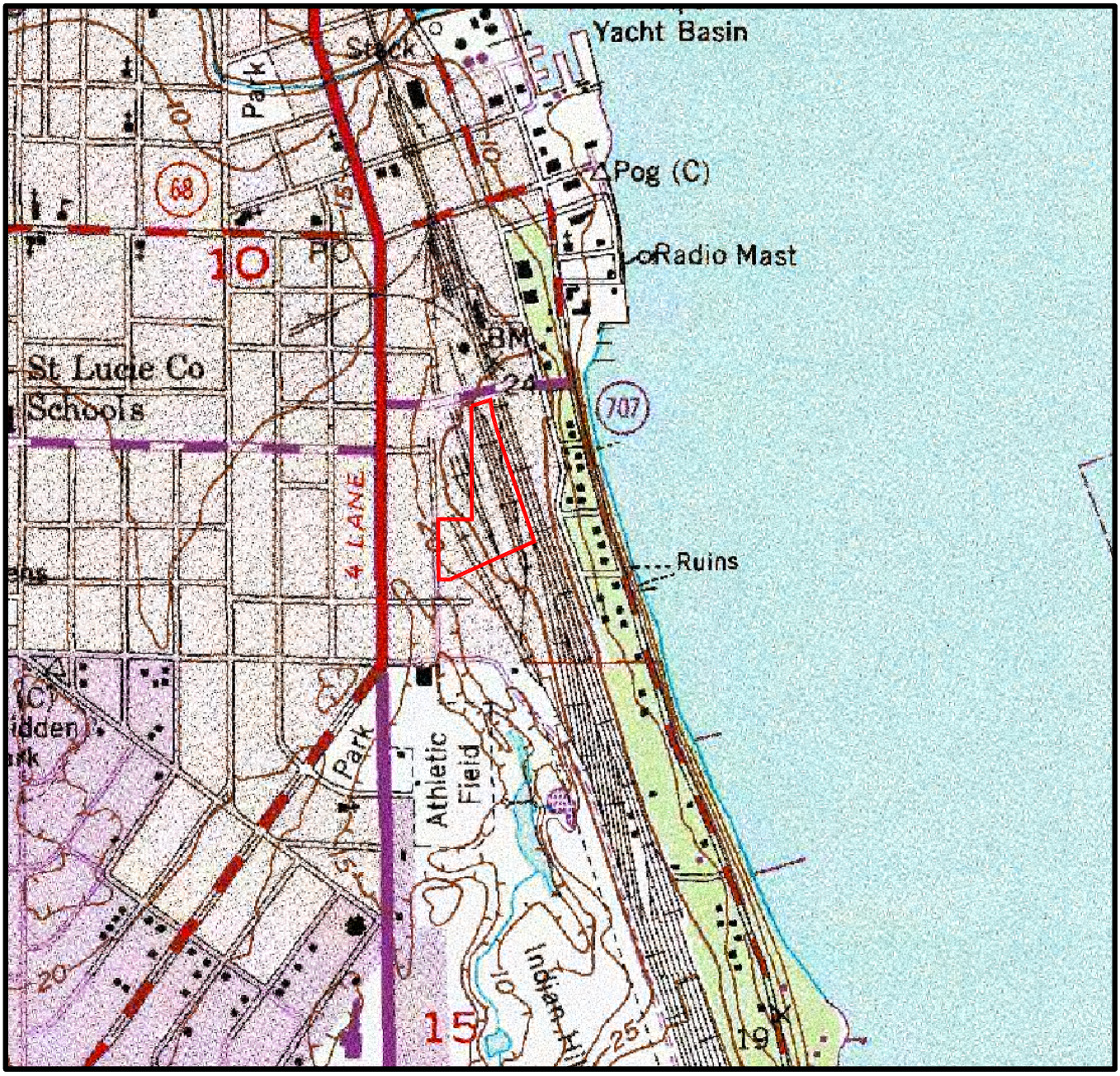
NOT A SURVEY

NORTH

0' 500' 1000' 2000' 4000'

SCALE: 1" = 1000'



SOURCE: USGS TOPOGRAPHIC MAP FORT PIERCE, FLORIDA QUADRANGLE, 7.5 MINUTE SERIES 27080-D3-TF-024.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	13 - TOPO MAP.DWG	1 APRIL 2015	13 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
USGS TOPOGRAPHIC MAP

H S E
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

- An eastern indigo snake protection plan should be implemented and coordinated with the Florida Fish and Wildlife Conservation Commission (FFWCC) prior to site clearing and development.

- The eastern indigo snake programmatic effect determination key was utilized for the project site and it was determined that the project, as proposed, would not likely adversely affect the eastern indigo snake.

- Prior to construction, eastern indigo snake and gopher tortoise protection/education posters shall be installed at all construction entrances to the site and pamphlets for each species will be handed out to personnel on-site.

- There is no habitat on-site for either the Florida scrub-jay or the wood stork.

- According to the City of Fort Pierce, all native trees having a DBH of 14" or more or cabbage palms having a minimum clear trunk of 10' must be located by a professional surveyor. Cabbage palms with a minimum clear trunk of 10' may occur on-site. According to CFPCOO Chapter 22, Article XII, Division 3, Section 22-194, removal of these trees will require a vegetation removal permit and mitigation to consist of compensatory tree planting.

- It is HSE's opinion that protected and/or specimen trees (cabbage palms) may occur on the project site.

- It is HSE's opinion that no (0) State (SFWMD) or Federal (USACE) jurisdictional wetlands occur on-site.

APPENDIX A

Agency Contacts

HOBE SOUND
ENVIRONMENTAL CONSULTANTS, INC.
9512 S.E. DUNCAN STREET
HOBE SOUND, FLORIDA 33455
PHONE: (772) 545-3676 CELL (772) 260-0857
E-MAIL: bobhsenv@gmail.com

1 April 2015

Ms. Janice Stearns
Florida Fish and Wildlife Conservation Commission
Office of Environmental Services
620 S. Meridian Street
Tallahassee, FL. 32399-1600

Via: E-mail: *gisrequest@fwc.com*

Re: Rocla Concrete Ties, Inc, ±7.547 acres of land located south of Citrus Avenue, east of South 3rd Street, north of Florida Avenue and west of the Florida East Coast Railway tracks. The project site is located in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

Latitude: 27°26'30.923"
Longitude: W80°19'25.462"

Dear Ms. Stearns:

Hobe Sound Environmental Consultants, Inc. (HSE) has been retained to conduct an endangered species survey on the above-referenced project site. Please review your files for records of any listed species that may occur on this site. The protected species survey was conducted according to Florida Fish and Wildlife Conservation Commission (FFWCC) guidelines. I have attached a location map and aerial photograph of the project site for your convenience.

Your immediate attention and cooperation regarding this matter is appreciated. Please feel free to contact me if you have any questions or require any additional information**. Please reference our project #15--009.01 when responding to this request.**

Sincerely,

Freda R. Posin

Freda R. Posin
Senior Environmental Specialist

Attachment
cc: File #15-009.01

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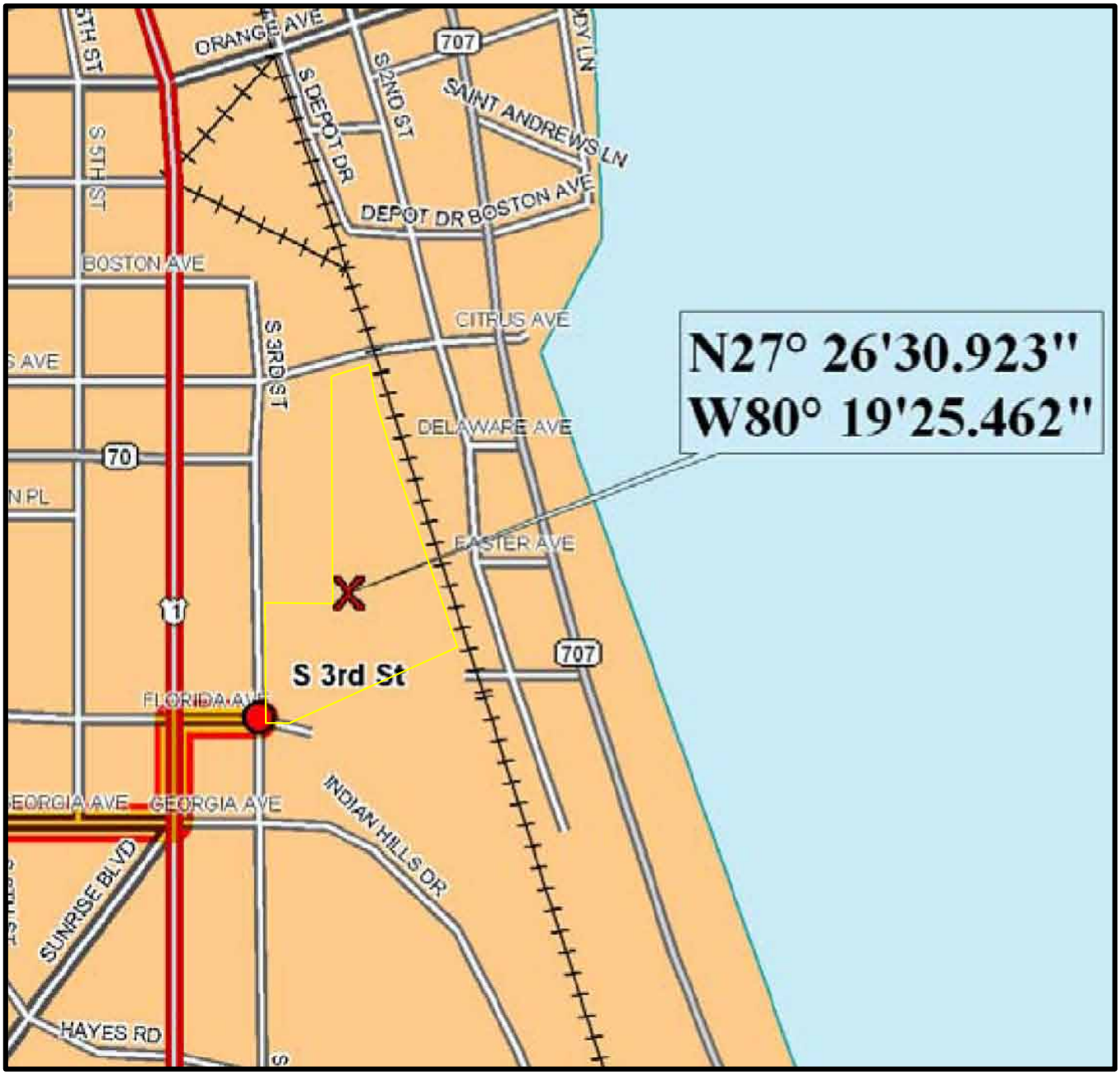
NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
LOCATION MAP

H S E
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



SOURCE:ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.

SOUTH 3rd STREET FORT PIERCE, FLORIDA

ENVIRONMENTAL ASSESSMENT (EA)

2014 AERIAL PHOTOGRAPH

HSE
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

HOBE SOUND
ENVIRONMENTAL CONSULTANTS, INC.
9512 S.E. DUNCAN STREET
HOBE SOUND, FLORIDA 33455
PHONE: (772) 545-3676 CELL (772) 260-0857
E-MAIL: bobhsenv@gmail.com

25 March 2015

Mr. Frederick Gaske, Director
Florida State Historic Preservation Program
Bureau of Historic Preservation
Division of Historical Resources
R.A. Gray Building
500 South Bronough Street, 4th Floor
Tallahassee, Florida 32399-0250

Re: Rocla Concrete Ties, Inc, ±7.547 acres of land located south of Citrus Avenue, east of South 3rd Street, north of Florida Avenue and west of the Florida East Coast Railway tracks. The project site is located in Section 10, Township 35S, Range 40E, City of Fort Pierce, Florida.

Latitude: 27°26'30.923"
Longitude: W80°19'25.462"

Dear Mr. Gaske:

The Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (COE) have requested that the Applicant contact your office and request a review of the above referenced project site. Please consider this letter as a formal request for your office to review the above referenced project site for the presence of any historical or archaeological properties within the project area.

The project site encompasses approximately 27.52 acres of land. Approximately half of the site was previously in citrus. Following is a brief description of the vegetation associations noted on-site.

150 - Industrial (±7.54 acres)
This designation covers the entire site, part of which has been developed and part of which has been previously cleared and contains a great deal of debris from adjacent industrial sites. Vegetation includes occasional cabbage palm (*Sabal palmetto*), Brazilian pepper (*Schinus terebinthifolius*),tough bumelia (*Sideroxylon tenax*), grapevine (*Vitis rotundifolia*), bamboo vine (*Smilax* spp.), periwinkle (*Catharanthus roseus*), Virginia creeper (*Parthenocissus quinquefolia*), cogongrass (*Imperata cylindrica*), dog fennel (*Eupatorium capillifolium*), annual ragweed (*Ambrosia artemisiifolia*), prickly pear cactus (*Opuntia* sp.), chalky bluestem

(*Andropogon capillipes*), wiregrass (*Aristida stricta*), tickseed (*Coreopsi*s sp.), rosary pea (*Abrus precatorius*), senna (*Cassia* sp.) and raspberry (*Rubus* sp.).

I am attaching a Vicinity Map, Location Map, Aerial Photograph, FLUCFCS Map, Soils Map, Topographic Map and photographs of the project site for your use and files. Your cooperation regarding this matter is appreciated. Please contact my office if you have any questions or comments regarding this matter. *Please respond to our project #15-009.01 when responding to this request*.

Sincerely,

Freda R. Posin

Freda R. Posin
Sr. Environmental Scientist

Attachments
cc: File #15-009.01

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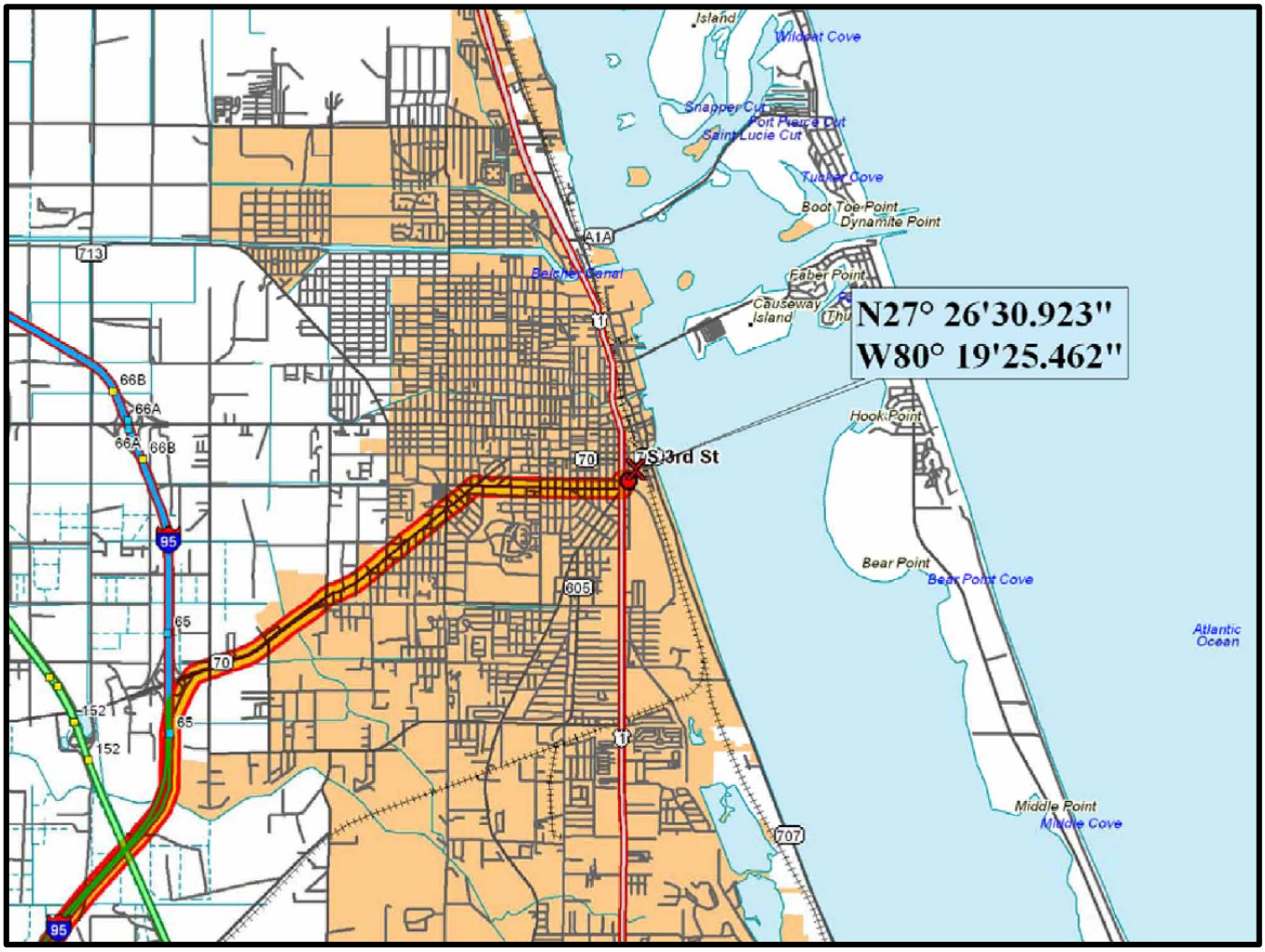
NOT A SURVEY

NORTH

0' 4000' 8000' 16000' 32000'

SCALE: 1" = 8000'



DIRECTIONS:

		Dist	Turn		Road	Near	Exit	Time	Total Dist
					I-95 S				
	in	0.00 mi	Start(N)		I-95 N			0:00:00	0.00 mi
	in	0.10 mi	Bear right(NNE)	on to	Okeechobee Rd Ramp			0:00:07	0.10 mi
	in	0.55 mi	Bear right(ENE)	on to	Okeechobee Rd			0:01:26	0.65 mi
	in	1.30 mi	Bear right(NE)	on to	SR 70 (Okeechobee Rd)			0:04:58	1.94 mi
	in	1.59 mi	Bear right(E)	on to	Georgia Ave			0:08:46	3.53 mi
	in	1.24 mi	Turn left(N)	on to	US 1 (S US 1|SR 5|S Federal Hwy|S 4...			0:10:53	4.77 mi
	in	0.07 mi	Turn right(E)	on to	Florida Ave			0:11:03	4.84 mi
	in	0.08 mi	Finish	at	Florida Ave			0:11:22	4.92 mi

Total Time: 0:11:22 Total Distance: 4.92 mi

SOURCE: DELORME STREET ATLAS USA,DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	01 - VICINITY MAP	1 APRIL 2015	1 OF 13
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW	

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
VICINITY MAP

H S E
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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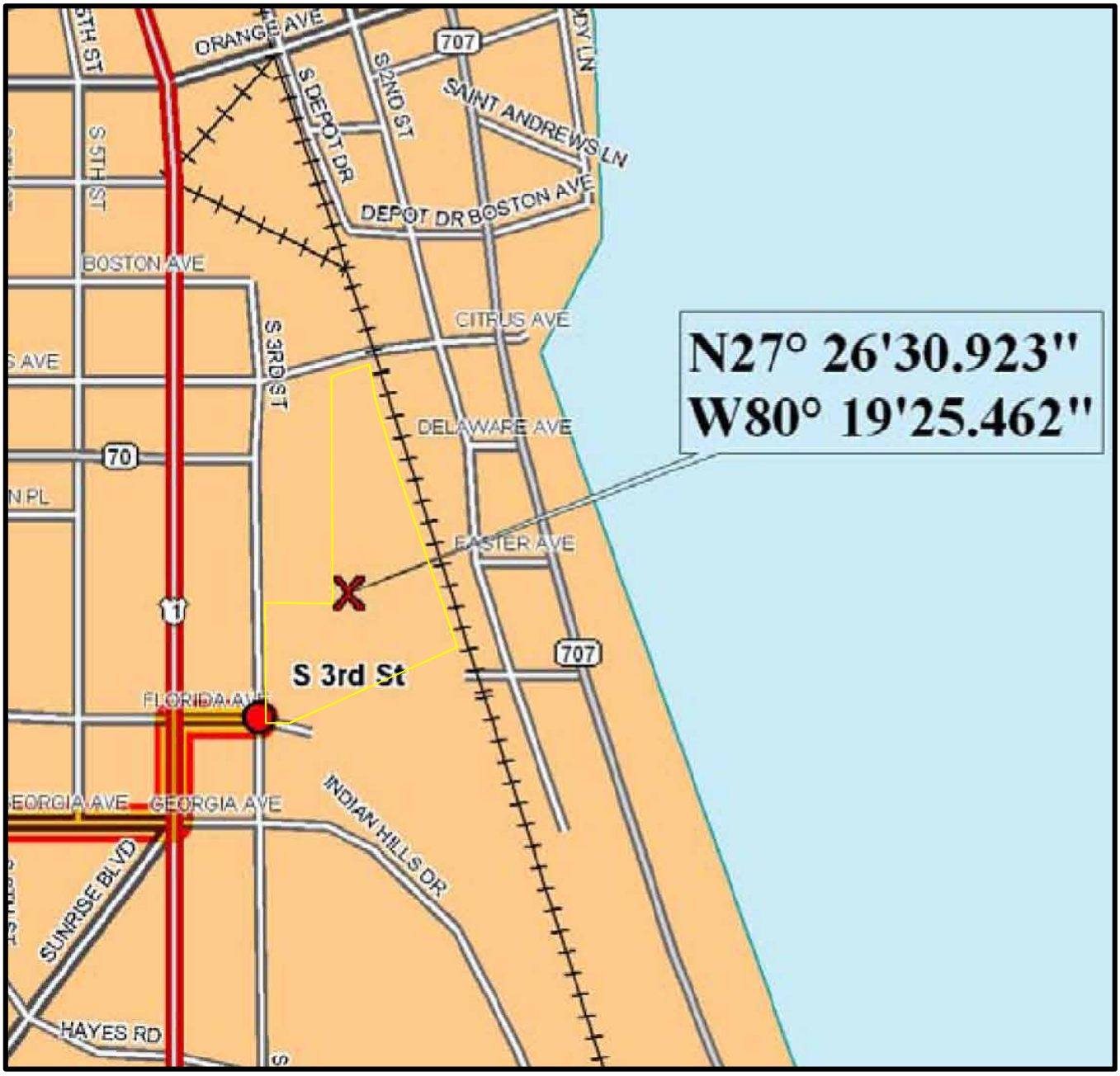
NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
LOCATION MAP

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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



SOURCE:ST. LUCIE COUNTY GIS, ST. LUCIE COUNTY, FLORIDA

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 03 - AERIAL.DWG	DATE: 1 APRIL 2015	FIGURE: 3 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.

SOUTH 3rd STREET FORT PIERCE, FLORIDA

ENVIRONMENTAL ASSESSMENT (EA)

2014 AERIAL PHOTOGRAPH

HSE
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NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



LEGEND

150 - INDUSTRIAL (7.54± ACRES)

SOURCE: LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM, HANDBOOK 1999 DEPARTMENT OF TRANSPORATION.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	11 - FLUCFCS MAP.DWG	1 APRIL 2015	11 OF 13
LATITUDE: 27°26'30.923"	LONGITUDE: -80°19'25.462"				DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
FLUCFCS (VEGETATION) MAP

H S E
Hobe Sound Environmental Consultants Inc.
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(772) 545-3676, E-mail: bobhsenv@gmail.com

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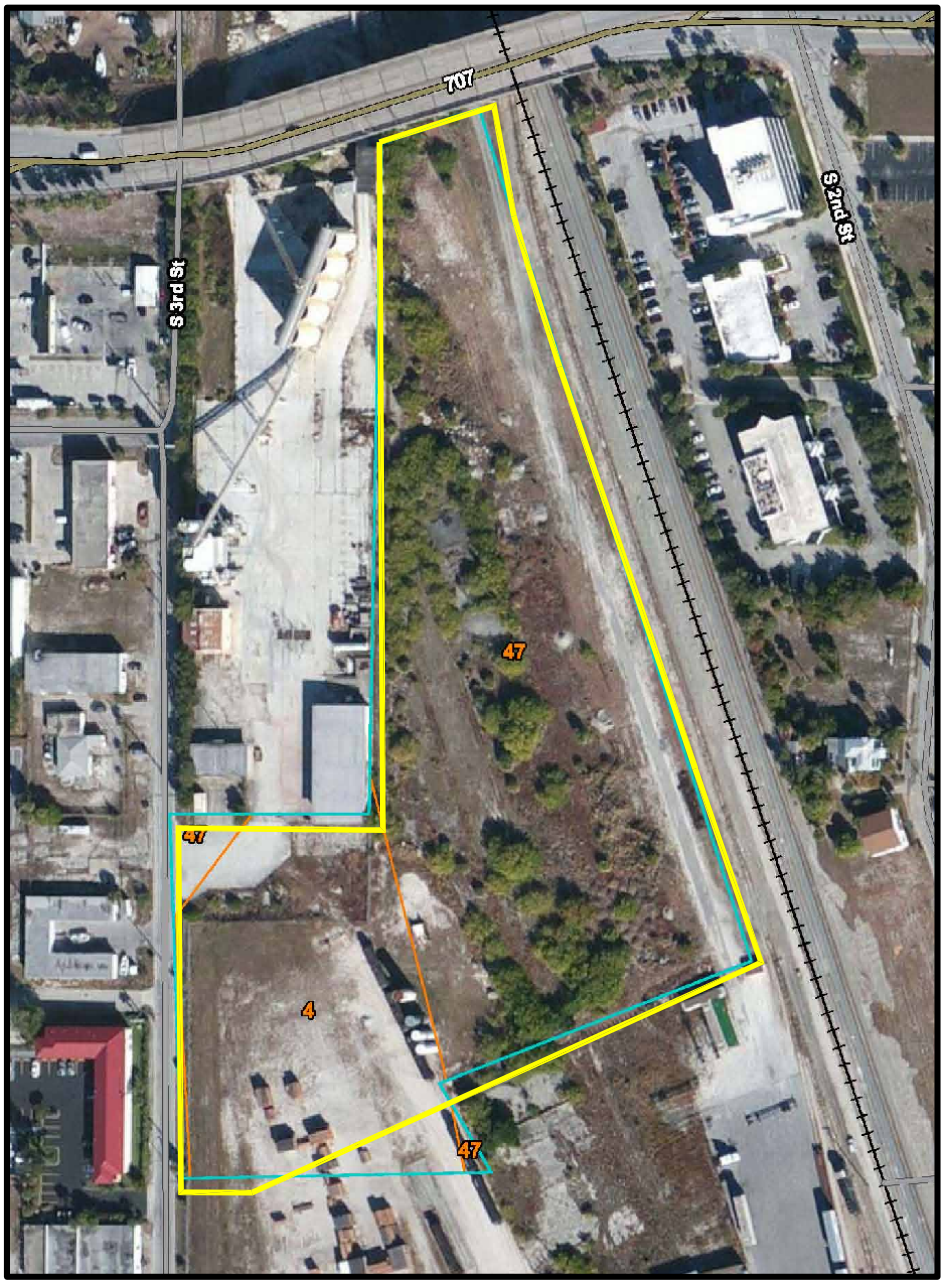
NOT A SURVEY

NORTH

0' 100' 200' 400' 800'

SCALE: 1" = 200'



LEGEND

4 - ARENTS, 0 TO 5 PERCENT SLOPES
47 - URBAN LAND

SOURCE: http://websoilsurvey.sc.egov.usda/App/WebSoilSurvey.aspx

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	12 - SCS SOIL MAP.DWG	1 APRIL 2015	12 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.

SOUTH 3rd STREET FORT PIERCE, FLORIDA

ENVIRONMENTAL ASSESSMENT (EA)

SCS SOIL MAP

H S E
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9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

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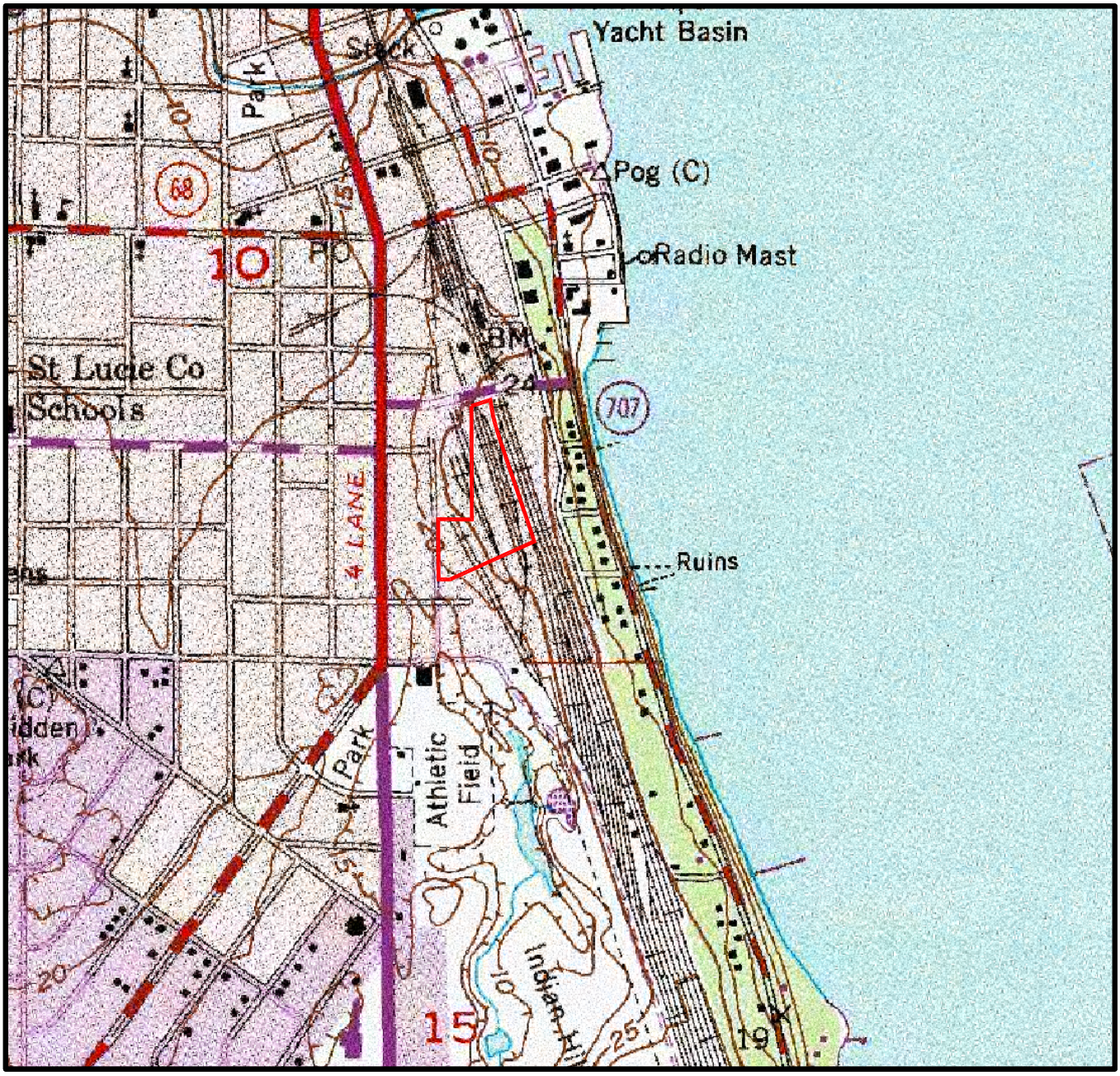
NOT A SURVEY

NORTH

0' 500' 1000' 2000' 4000'

SCALE: 1" = 1000'



SOURCE: USGS TOPOGRAPHIC MAP FORT PIERCE, FLORIDA QUADRANGLE, 7.5 MINUTE SERIES 27080-D3-TF-024.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.:	DRAWING NAME:	DATE:	FIGURE:
	10	35S	40E	15-009.01	13 - TOPO MAP.DWG	1 APRIL 2015	13 OF 13
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
USGS TOPOGRAPHIC MAP

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Hobe Sound, FL. 33455
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SOURCE: PHOTOGRAPHS BY HSE



PHOTOGRAPH #01: AT ROAD ALONG EASTERN SITE BOUNDARY, LOOKING NORTHWEST TOWARD CITRUS AVE.



PHOTOGRAPH #02: LOOKING NORTHEAST TOWARD CITRUS AVE. FROM SOUTH END OF PROPERTY ADJACENT TO FEC RR TRACKS



PHOTOGRAPH #03: PRICKLY PEAR CACTUS IN WEST CENTRAL PORTION OF SITE



PHOTOGRAPH #04: CONCRETE RUBBLE LEFT ON-SITE



PHOTOGRAPH #05: LOOKING NORTHEAST FROM SOUTHWEST PORTION OF SITE



PHOTOGRAPH #06: GOPHER TORTOISE AT HIS BURROW NEAR FEC RR TRACKS

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: APP B PHOTOS.DWG	DATE: 1 APRIL 2015	APPENDIX B FIGURE: 1 OF 1
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
SITE PHOTOGRAPHS

H S E
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, Fl. 33455
(772)545-3676, E-mail: bobhsenv@gmail.com

HOBE SOUND
ENVIRONMENTAL CONSULTANTS, INC.
9512 S.E. DUNCAN STREET
HOBE SOUND, FLORIDA 33455
PHONE: (772) 545-3676 CELL (772) 260-0857
E-MAIL: bobhsenv@gmail.com

1 April 2015

Ms Dana Hartley
U.S. Fish and Wildlife Service
P.O. Box 2676
Vero Beach, Florida 32960-2676

Re: Rocla Concrete Ties, Inc., City of Fort Pierce, St. Lucie County, Florida, Section 10, Township 35S, Range 40E.

Latitude: 27°26'30.923"
Longitude: W80°19'25.462"

Via E-mail: dana_hartley@fws.gov

Dear Ms. Hartley:

Hobe Sound Environmental Consultants, Inc. (HSE) has been retained to conduct an endangered species survey on the above referenced project site. Please review your files for records of any listed species that may occur on this site. The protected species survey will be conducted according to Florida Fish and Wildlife Conservation Commission (FFWCC) guidelines. I have attached a location map of the project area for your convenience.

Your immediate attention and cooperation regarding this matter are appreciated. Please feel free to contact me if you have any questions or require additional information concerning this matter. Please reference our file #15-009.01 when responding to this letter.

Sincerely,

Freda R. Posin

Freda R. Posin
Senior Environmental Scientist

/frp
Attachment

cc: File #15-009.01

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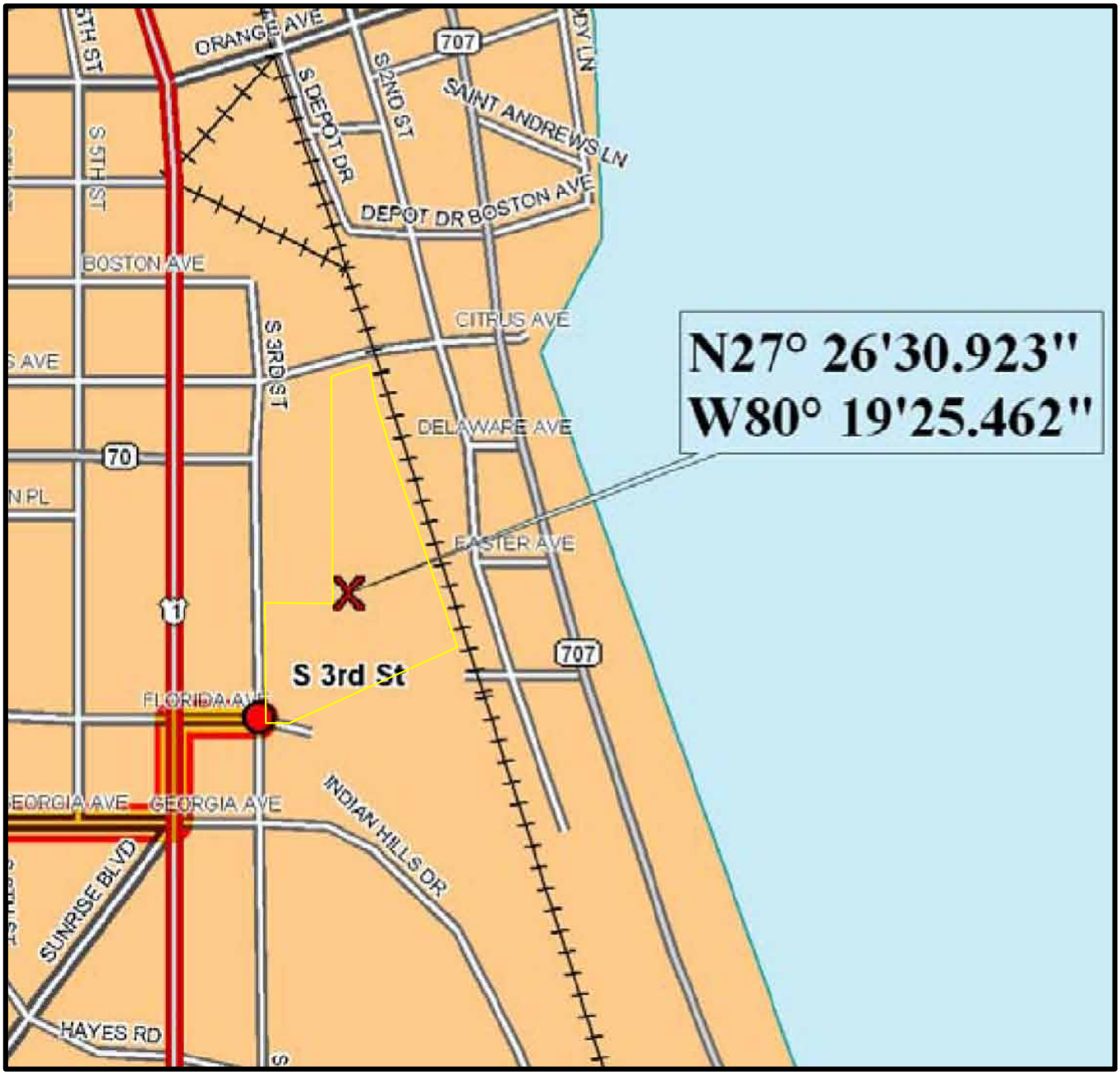
NOT A SURVEY

NORTH

0' 250' 500' 1000' 2000'

SCALE: 1" = 500'



SOURCE: DELORME STREET ATLAS USA DELUXE.

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: 02 - LOCATION MAP.DWG	DATE: 1 APRIL 2015	FIGURE: 2 OF 13
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
LOCATION MAP

H S E
Hobe Sound Environmental Consultants Inc.
9512 SE Duncan Street
Hobe Sound, FL. 33455
(772) 545-3676, E-mail: bobhsenv@gmail.com

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
850-681-9364 fax
www.fnai.org

Florida Natural Areas Inventory

Biodiversity Matrix Query Results

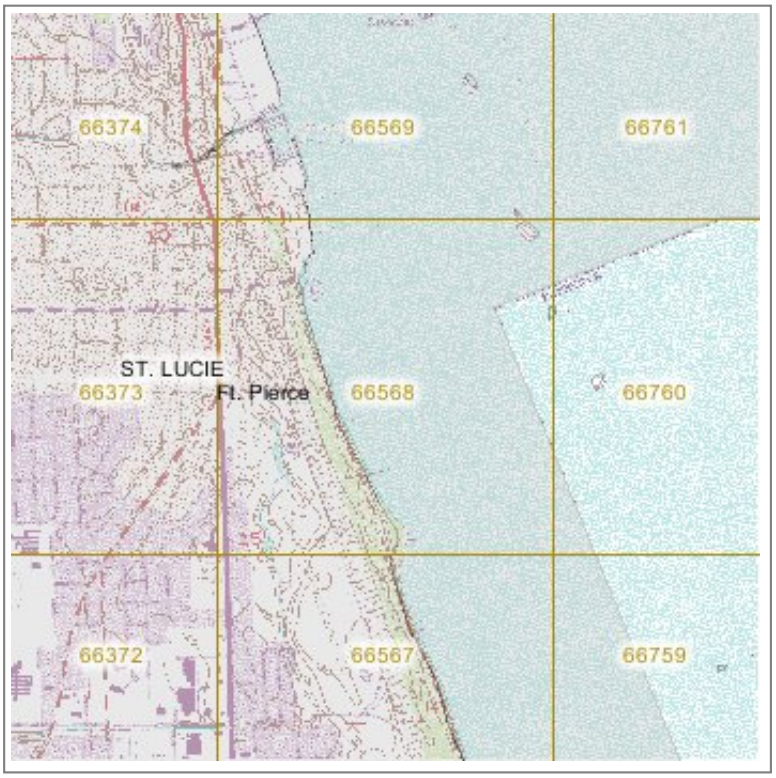
UNOFFICIAL REPORT

Created 4/2/2015

(Contact the FNAI Data Services Coordinator at 850.224.8207 for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

Report for 1 Matrix Unit: 66568



Descriptions

DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.

DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.

LIKELY - The species or community is *known* to occur in this vicinity, and is considered likely within this Matrix Unit because:

1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; *or*
2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.

POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.

Matrix Unit ID: 66568

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

1 **Likely** Element Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Trichechus manatus Manatee	G2	S2	LE	FE

Matrix Unit ID: 66568

20 **Potential** Elements for Matrix Unit 66568

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Acipenser oxyrinchus oxyrinchus Atlantic Sturgeon	G3T3	S1	PS:LE,LT	SSC
Athene cunicularia floridana Florida Burrowing Owl	G4T3	S3	N	SSC
Coelorachis tuberculosa Piedmont Jointgrass	G3	S3	N	LT
Conradina grandiflora Large-flowered Rosemary	G3	S3	N	LT
Ctenogobius stigmaturus Spottail Goby	G2	S2	N	N
Drymarchon couperi Eastern Indigo Snake	G3	S3	LT	FT
Eretmochelys imbricata Hawksbill Sea Turtle	G3	S1	LE	FE
Forestiera segregata var. pinetorum Florida Pinewood Privet	G4T2	S2	N	N
Glandularia maritima Coastal Vervain	G3	S3	N	LE
Gopherus polyphemus Gopher Tortoise	G3	S3	C	ST
Halophila johnsonii Johnson's Seagrass	G2	S2	LT	N
Lechea cernua Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii Small's Flax	G2T2	S2	N	LE
Pituophis melanoleucus mugitus Florida Pine Snake	G4T3	S3	N	SSC
Pteroglossaspis ecristata Giant Orchid	G2G3	S2	N	LT
Rivulus marmoratus Mangrove Rivulus	G4G5	S3	SC	SSC
Rostrhamus sociabilis plumbeus Snail Kite	G4G5T2	S2	LE	FE
Sceloporus woodi Florida Scrub Lizard	G2G3	S2S3	N	N
Sciurus niger shermani Sherman's Fox Squirrel	G5T3	S3	N	SSC
Setophaga discolor paludicola Florida Prairie Warbler	G5T3	S3	N	N

Disclaimer

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

Unofficial Report

These results are considered unofficial. FNAI offers a Standard Data Request option for those needing certifiable data.

APPENDIX B

Project Site Photographs

THIS DRAWING, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DRAWING WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC. SHALL BE WITHOUT LIABILITY TO HOBE SOUND ENVIRONMENTAL CONSULTANTS, INC.

SOURCE: PHOTOGRAPHS BY HSE



PHOTOGRAPH #01: AT ROAD ALONG EASTERN SITE BOUNDARY, LOOKING NORTHWEST TOWARD CITRUS AVE.



PHOTOGRAPH #02: LOOKING NORTHEAST TOWARD CITRUS AVE. FROM SOUTH END OF PROPERTY ADJACENT TO FEC RR TRACKS



PHOTOGRAPH #03: PRICKLY PEAR CACTUS IN WEST CENTRAL PORTION OF SITE



PHOTOGRAPH #04: CONCRETE RUBBLE LEFT ON-SITE



PHOTOGRAPH #05: LOOKING NORTHEAST FROM SOUTHWEST PORTION OF SITE



PHOTOGRAPH #06: GOPHER TORTOISE AT HIS BURROW NEAR FEC RR TRACKS

PARCEL ID # 2410-805-0005-000-1

ST. LUCIE COUNTY FLORIDA	SEC.	TWP.	R.	HSE JOB NO.: 15-009.01	DRAWING NAME: APP B PHOTOS.DWG	DATE: 1 APRIL 2015	APPENDIX B FIGURE: 1 OF 1
	10	35S	40E				
LATITUDE: 27°26'30.923"		LONGITUDE: -80°19'25.462"			DESIGNED BY: RLW	DRAWN BY: FRP	CHECKED BY: RLW

ROCLA CONCRETE TIES, INC.
SOUTH 3rd STREET FORT PIERCE, FLORIDA
ENVIRONMENTAL ASSESSMENT (EA)
SITE PHOTOGRAPHS

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CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS

TRAFFIC IMPACT STUDY

For

ROCLA CROSSTIE FACILITY

In

The City of Fort Pierce

Prepared for

Rocla Concrete Tie, Inc.

Prepared By

Culpepper & Terpening, Inc.
2980 South 25th Street
Fort Pierce, FL 34981

April 2015
(Updated May 26, 2015)



Stefan K. Matthes, P.E.
Florida Reg. No. 38723

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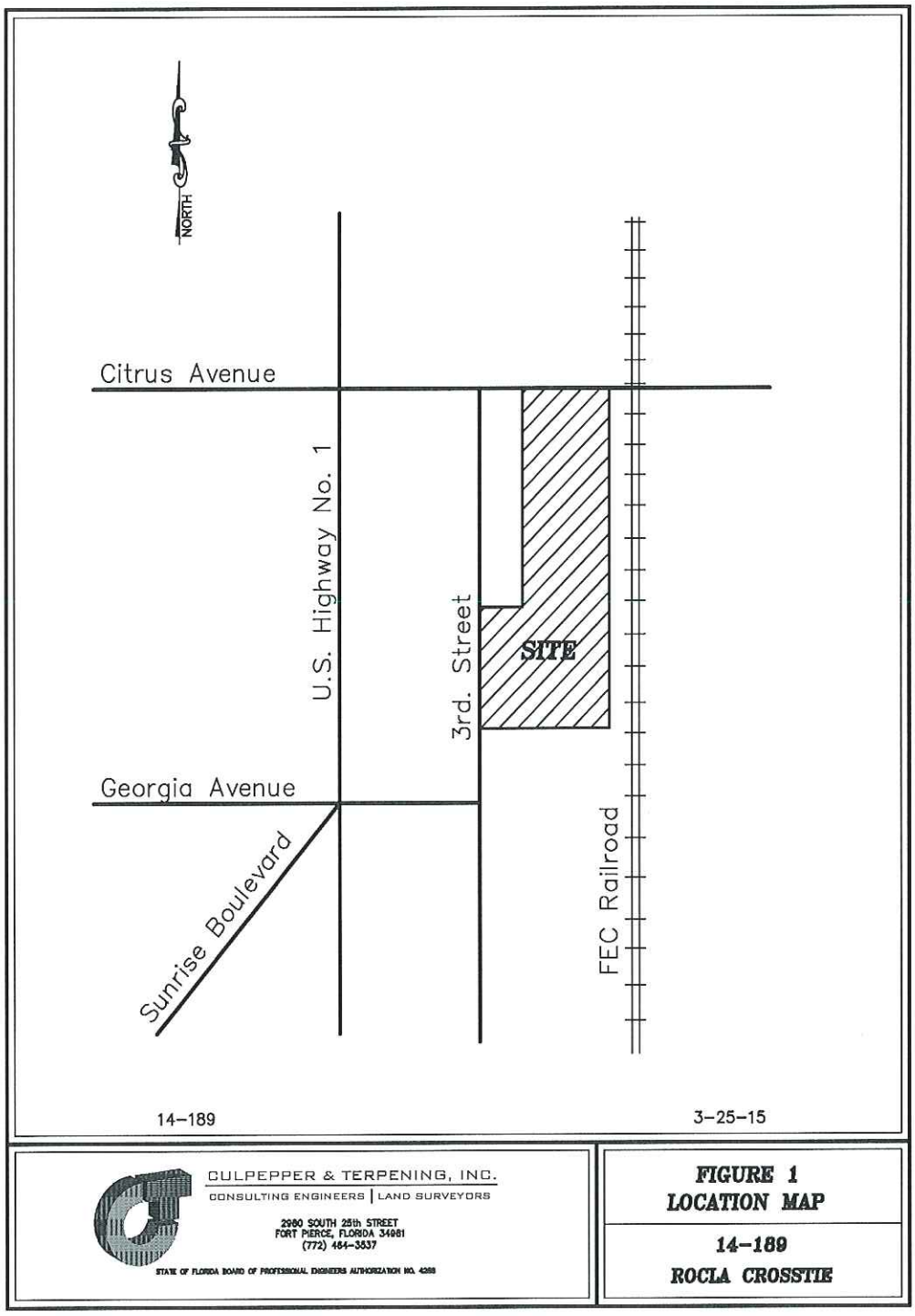
Project Description

The proposed project, Rocla Crosstie Facility, is located on the east side of South 3rd Street, south of the Citrus Avenue overpass, in the eastern section of the City of Ft. Pierce, Florida (See Figure No. 1, Location Map). The Rocla Crosstie Facility project will consist of a 16,850 square foot railroad crosstie manufacturing building and a separate 2,625 square foot office building. The overall property is comprised of 2 separate parcels of land that will be leased from the Florida East Coast Railroad totaling 7.55 acre or land. The site is located in Section 10, Township 35 South, Range 40 East, St. Lucie County, Florida.

Figure 1 (Location Map and Study Area)



Study Methodology

As the project is located within the City of Ft. Pierce, the Scope and Methodology of this report is prepared in accordance with the requirements of the City. The project is anticipated for construction in late 2015 to and therefore it was determined that the impacts of project development will be analyzed in 2020 forecast condition.

Section A – Definition of Study Area

The study area as defined by the City of Fort Pierce Chapter 22.217.*f*.2 shall be according to the Table I below:

Table I		
Size of Project	**Trips Generated**	**Study Area**
Minimal Scale	Trips 9-50	1.0 Mile Radius
Small Scale	Trips 51-100	1.5 Mile Radius
Intermediate Scale	Trips 101-500	2.0 Mile Radius
Medium Scale	Trips 501-1000	3.0 Mile Radius
Large Scale	Trips 1000-Up	5.0 Mile Radius

The Study Area includes all major roadways and intersections within the zone of influence. From the data collected in Table IV it has been determined that the Rocla Crosstie Facility is a Small Scale project. The study area shall include the following roadway segments and intersections:

Roadway Segments

- US Highway No. 1: Virginia Avenue to Orange Avenue
- Georgia Avenue: South 3rd Street to US Highway No. 1

Intersections

- US Highway No. 1 and Georgia Avenue

The following traffic study will be prepared in accordance with Chapter 22.217 of the City of Ft. Pierce Code. The analysis will be based upon the Level-of Service (LOS) standards established by the Florida Department of Transportation (FDOT) 2012 Level of Service Handbook for both the Average Daily traffic (ADT) and pm Peak Hour traffic conditions. The LOS standards found in the FDOT 2012 Level of Service Handbook are provided as Table 1 (Generalized Annual Average Daily Volumes for Florida's Urbanized Areas), and Table 2 (Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas) of this report.

Table 1

TABLE 1

Generalized **Annual Average Daily** Volumes for Florida's **Urbanized Areas**

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	16,800	17,700	**
4	Divided	*	37,900	39,800	**
6	Divided	*	58,400	59,900	**
8	Divided	*	78,800	80,100	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	7,300	14,800	15,600
4	Divided	*	14,500	32,400	33,800
6	Divided	*	23,300	50,000	50,900
8	Divided	*	32,000	67,300	68,100

Non-State Signalized Roadway Adjustments
(Alter corresponding state volumes by the indicated percent.)
Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment
Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	2,900	7,600	19,700
50-84%	2,100	6,700	19,700	>19,700
85-100%	9,300	19,700	>19,700	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	2,800	9,500
50-84%	*	1,600	8,700	15,800
85-100%	3,800	10,700	17,400	>19,700

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
4	47,400	64,000	77,900	84,600
6	69,900	95,200	116,600	130,600
8	92,500	126,400	154,300	176,600
10	115,100	159,700	194,500	222,700
12	162,400	216,700	256,600	268,900

Urbanized

Lanes	B	C	D	E
4	45,800	61,500	74,400	79,900
6	68,100	93,000	111,800	123,300
8	91,500	123,500	148,700	166,800
10	114,800	156,000	187,100	210,300

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 20,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	8,600	17,000	24,200	33,300
4	Divided	36,700	51,800	65,600	72,600
6	Divided	55,000	77,700	98,300	108,800

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

2012 FDOT QUALITY/LEVEL OF SERVICE HANDBOOK TABLES

Table 2

TABLE 7

Generalized **Peak Hour Directional** Volumes for Florida's **Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments
(Alter corresponding state volumes by the indicated percent.)
Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment
Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
2	2,260	3,020	3,660	3,940
3	3,360	4,580	5,500	6,080
4	4,500	6,080	7,320	8,220
5	5,660	7,680	9,220	10,360
6	7,900	10,320	12,060	12,500

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	420	840	1,190	1,640
2	Divided	1,810	2,560	3,240	3,590
3	Divided	2,720	3,840	4,860	5,380

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

2012 FDOT QUALITY/LEVEL OF SERVICE HANDBOOK TABLES

Section B – Inventory of Existing Facilities

The project traffic analysis is based upon the current condition of the surrounding roadway network that is anticipated to be impacted by the project. An inventory of the existing surrounding roadway network is provided as follows:

Roadways:

US Highway No. 1

US Highway No. 1 within the defined study area currently consists of a 4-lane divided roadway section containing two (2) 12' lanes northbound, two (2) 12' lanes southbound and left turn bays at all major intersections. The existing right-of-way of US Highway No. 1 is 70' to 80' in width.

US Highway No. 1 within the study area is classified as a State Two-Way Class II – Interrupted Flow Arterial and under the jurisdiction of the Florida Department of Transportation (FDOT).

South 3rd Street

The South 3rd Street Corridor consists of a 2-lane undivided roadway section containing 11' wide lanes in both the northbound and southbound direction. The existing right-of-way of South 3rd Street is 40' in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Georgia Avenue

Georgia Avenue within the study area is a 2-lane undivided rural roadway east of US Highway 1 and a 2-lane undivided urban roadway west of US Highway containing 11' wide travel lanes in both the easy and west bound direction. The existing right-of-way for this portion of Georgia Avenue is approximately 60 feet in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Sunrise Boulevard

Sunrise Boulevard within the study area is a 2-lane divided urban roadway that terminates at US Highway 1 at the intersection with Georgia Avenue. The roadway contains 11' wide travel lanes in both the east and west bound direction and includes parallel parking along the outside of each travel lane. The existing right-of-way for this portion of Sunrise Boulevard is approximately 80 feet in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Intersections:

US Highway No. 1 and Georgia Avenue/Sunrise Boulevard

The intersection of US Highway No. 1 and Georgia Avenue/Sunrise Boulevard is signalized. The intersection geometry is as follows:

Eastbound	2	Lane	Lt/Thru	Westbound	1	Lane	Left/Thru/Rt
	1	Lane	Right				
Southbound	1	Lane	Left	Northbound	1	Lane	Left
	1	Lane	Thru		1	Lane	Thru
	1	Lane	Thru/Rt		1	Lane	Thru/Rt

Existing Traffic Conditions

The Peak Season Average Daily Traffic Volume for the roadway of the project area were obtained from the Fall 2014, St. Lucie Transportation Planning Organization Counts, and augmented by Culpepper & Terpening, Inc. with traffic counts taken during the week of March 23, 2015. These counts include the committed trips as provided in the TPO data sheets and are provided in Table 3 – Existing Traffic Conditions.

Table 3
Existing Traffic Conditions

Roadway	Classification		LOS D Capacity	ADT	Committed Trips	Total /LOS	
	Type	Lanes					
South 3rd Street							
N. of Georgia Ave	Local	2 ln	13,320	270	0	270	B
Georgia Avenue							
West of US 1	Mc/Mc	2 ln	13,320	1,964	0	1,964	B
East of US 1	Local	2 ln	13,320	540	0	540	B
US 1 North							
North of Georgia Ave	CII	4 ln	30,780	27,870	0	27,870	C
South of Georgia Ave	CII	4 ln	30,780	24,720	0	24,720	C

The PM Peak Hour Directional Volume for the roadways located within the study area were obtained from the Fall 2014, St. Lucie Transportation Planning Organization Counts, and augmented by Culpepper & Terpening, Inc. with traffic counts taken during the week of March 23, 2015. These counts include the committed trips as provided in the TPO data sheets and are provided in Table 4 – Existing Roadway Link LOS.

Table 4
Existing Roadway Link LOS

Roadway	Classification		ADT LOS Capacity	ADT Committed/ LOS		PM Peak Hr/LOS Capacity	PM PK Hr Directional Volumes/LOS	
	Type	Lanes						
South 3rd Street								
N. of Georgia Ave	Local	2 ln	13,320	270	B	675	17	B
Georgia Avenue								
West of US 1	Mc/Mc	2 ln	13,320	1,964	B	675	123	C
East of US 1	Local	2 ln	13,320	540	B	675	34	B
US 1 North								
North of Georgia Ave	CI-II	4 ln	30,780	27,870	C	1,548	1,218	D
South of Georgia Ave	CI-II	4 ln	30,780	24,720	C	1,548	1,352	D

Trip Generation

The proposed crosstie manufacturing facility will consist of a 16,850 square foot manufacturing building and a 2,625 square foot office building. The facility is a specialized operation that will provide rail crosstie production in two eight hour work shifts. The work shifts will be from 7 AM to 3 PM and 7 PM to 3 AM. Administration staff will work from 7 AM to 4 PM.

Trip Generation for the proposed crosstie manufacturing facility will be estimated on the number of employees and deliveries that are anticipated for the facility. The Average Daily Traffic (ADT) is based upon the following:

Administrative Staff:	4 Employees @ 2.5 trips/employee
Early Shift:	20 Employees @ 2.5 trips/employee
Late Shift:	18 Employees @ 2 trips/employee
Deliveries:	14 deliveries/day

The total average daily traffic is calculated as follows:

ADT = (4 employees x 2.5) + (20 employees x 2.5) + (18 employees x 2) + (14 deliveries x 2) = 112 trips per day

The peak hour of operation traffic will be the combined administrative staff and early shift employee start of work which will be a total of 24 Vehicles Per Hour (VPH) between 6:00 AM and 7:00 AM.

It should be noted that due to the nature of the facilities operations, and timing of the shift work, there will be negligible trips during the AM and PM peak hours of traffic on the roadway network.

Trip Distribution

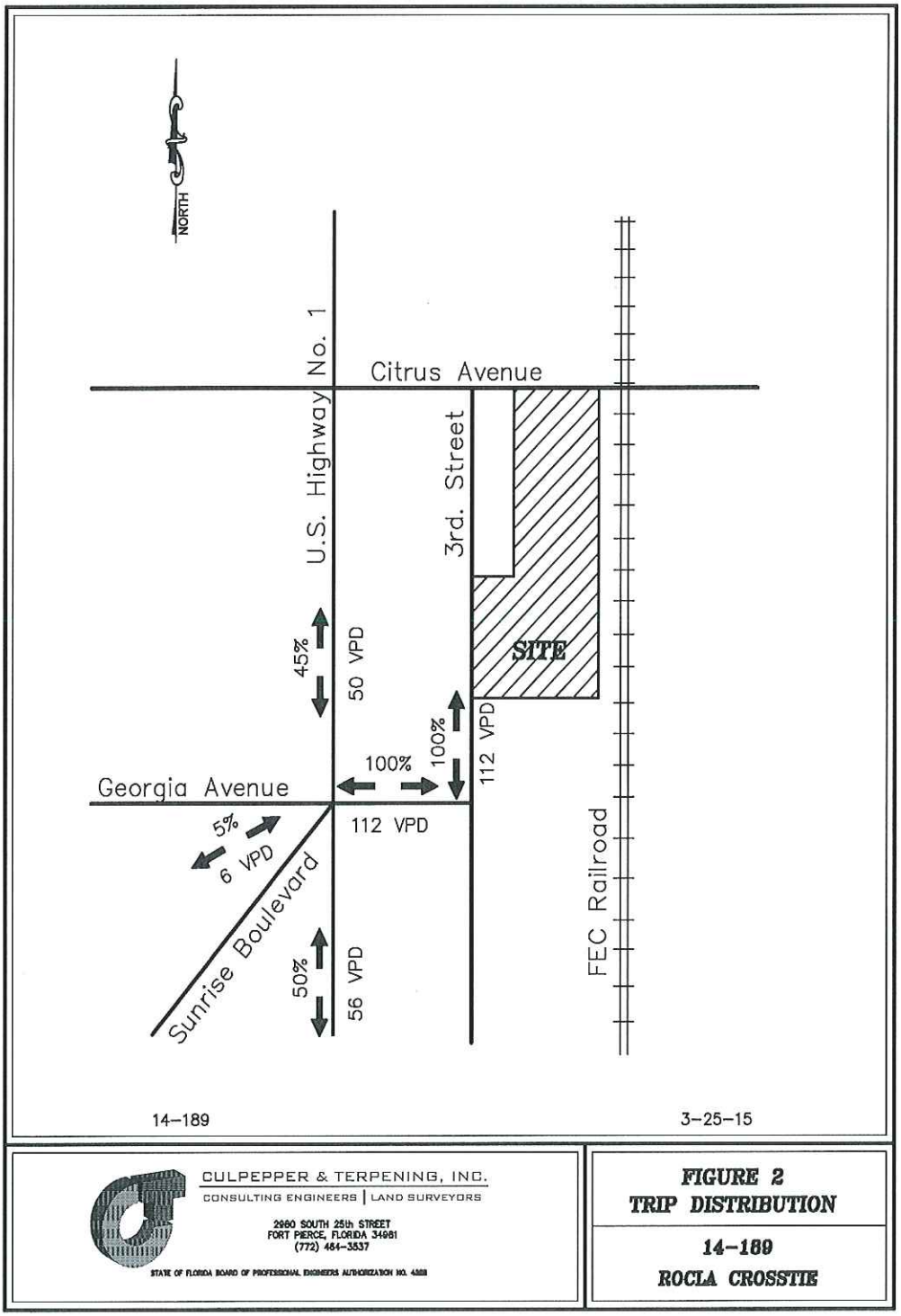
The Trip Distribution from the site onto local streets was derived based upon the surrounding developments as well as the existing Transportation Network. The Distribution onto the surrounding links was then derived and is portrayed as Figure No. 2. A summary of the Major Trip Assignments were estimated as follows:

Table 5
Trip Distribution

Link	%	ADT	PM Peak Hr. Dir.
South 3rd Street			
North of Georgia	100%	112 vpd	0 vph
Georgia Avenue			
East of US 1	100%	112 vpd	0 vph
West of US 1	5%	6 vpd	0 vph
US 1 North			
North of Georgia	45%	50 vpd	0 vph
South of Georgia	50%	56 vpd	0 vph

A complete trip assignment by percentage is shown on Figure No. 2.

Figure 2 – Trip Distribution



Capacity Analysis

Roadway Link Analysis:

The Trip Assignment Volumes calculated in the previous sections were added to the existing volumes and background trips assigned to the roadway links within the study area. Project trip distribution onto the surrounding links was then derived and is portrayed as Figure No. 2. The existing traffic volumes provided in the fall St. Lucie County TPO Traffic Counts were increased by .5% per year from 2015 to account for growth through the 2020 forecasting year. The .5% growth factor was determined by utilizing the St. Lucie County TPO count data for the past 3 years to calculate the actual growth experienced within the transportation service area.

Level of Service, Table 1, of the Florida FDOT 2012 Quality / Level of Service Handbook was used for both the existing (Pre-Development, including background) and Post-Development Levels of Service. Table 6, Roadway Link Analysis (ADT) provides a summary of the results of the project's impact on the roadway network.

Table 6
Roadway Link Analysis (ADT)

Roadway	LOS Capacity	Existing Conditions		Growth (2020)*	Pre-Development Conditions		Project Traffic	Post-Development Conditions	
				.5%					
South 3rd Street									
North of Georgia	13,320	270	B	7	277	B	112	389	B
Georgia Avenue									
West of US 1	13,320	1,964	B	50	2,014	B	6	7,909	B
East of US 1	13,320	540	B	14	554	B	112	666	B
US 1 North									
North of Georgia	30,780	27,870	C	704	28,774	C	50	28,824	C
South of Georgia	30,780	24,720	C	624	25,344	C	56	25,400	C

Table 7 (Impact on Local Roadway Network (ADT)) and Table 8 (Local Roadway Network & Impact (PM Peak Hour Directional) provide for the actual impact anticipated from the development of the project through the 2020 horizon year for both the ADT and PM peak Hour conditions.

Table 7 Impact on Local Roadway Network (ADT)							
		ADT LOS Capacity	Project Traffic	ADT Post-Development Conditions		ADT % Impact	Remaining Capacity
South 3rd Street							
North of Georgia		13,320	112	389	B	0.003%	12,931
Georgia Avenue							
West of US 1		13,320	6	7,909	B	0.004%	5,411
East of US 1		13,320	112	666	B	0.005%	12,654
US 1 North							
North of Georgia		30,780	50	28,824	C	0.002%	1,956
South of Georgia		30,780	56	25,400	C	0.002%	5,380

Table 8 Roadway Network & Impact (PM Peak Hour Directional)									
Roadway		PM Peak LOS D Capacity	PM Peak Pre-Development		Project Traffic	PM Peak Post-Development Conditions		% Impact	Remaining Capacity
			2020						
South 3rd Street									
N. of Georgia Ave		675	17	B	0	17	B	0.0%	658
Georgia Avenue									
West of US 1		675	126	B	0	126	B	0.0%	549
East of US 1		675	34	B	0	34	B	0.0%	641
US 1 North									
North of Georgia Ave		1,548	1,248	C	0	1,248	C	0.0%	300
South of Georgia Ave		1,548	1,386	C	0	1,386	C	0.0%	162

As demonstrated by the Tables 6, 7 and 8; the project will not have an impact on the existing roadway network in either the Average Daily or PM Peak Hour traffic conditions. The roadways are expected to operate at acceptable levels of service through the 2020 horizon year.

Intersection Analysis

In order to determine the project's impact is on the intersecting roadways, analysis has been conducted during the time periods that experience the most traffic volumes within any hour of the weekday. The AM and PM Peak Hour Traffic conditions typically experience the highest traffic volumes during the weekday. The existing Peak Hour Volumes at the intersection of US Highway No. 1 and Georgia Ave/Sunrise Boulevard were taken by Culpepper & Terpening, Inc. on March 26, 2015 during both the AM and PM peak hour time periods.

The traffic counts determined that the peak hour conditions at the intersection are as follows:

AM Peak Hour: 7:45 am to 8:45 am
PM Peak Hour: 4:45 pm to 5:45 pm

The individual turning movement counts for both the AM and PM peak hours were then grown to the 2020 analysis year by the .5% growth factor established consistent with the Average Daily Traffic.

Project traffic, as mentioned in the trip generation section of this report, will be negligible on the roadway network due to the timing of the proposed shift work. Intersection analysis is however provided in this report to show the current (2015), and horizon analysis (2020) years performance of the closest intersection to the project, US Highway No. 1 and Georgia Ave/Sunrise Boulevard.

The Pre-Development and Post-Development AM and PM Peak Hour turning movements for the project intersections are depicted in Figures 3 and 4 for both the current 2015 and future 2020 conditions.

Figure 3 – AM Peak Hour Turning Movements

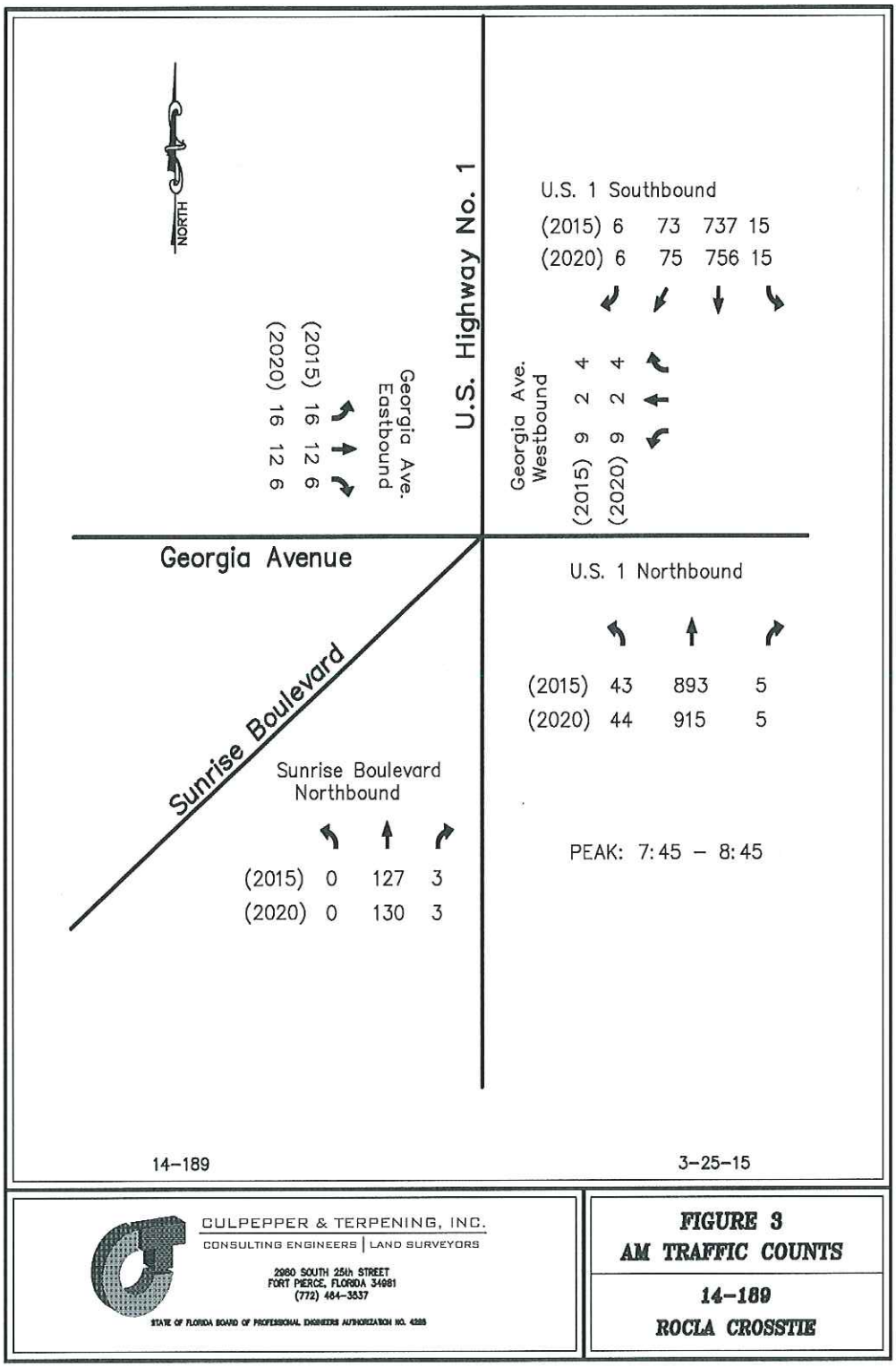
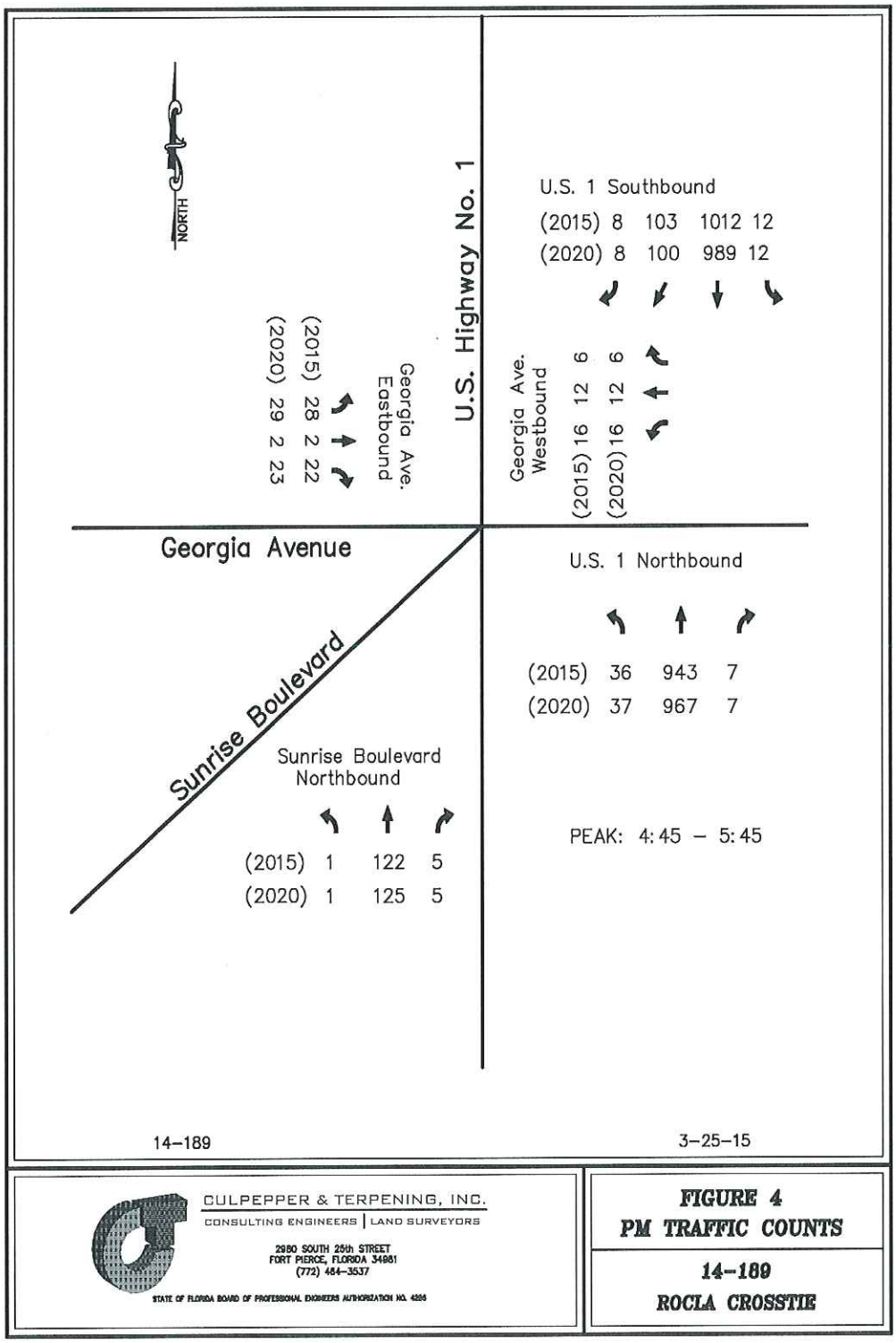


Figure 4 – PM Peak Hour Turning Movements



The following is a summary of the results of the Levels of Service for each approach and the overall intersection. A detailed analysis of each lane group in a graphical representation of the lane geometry for the each of the studied intersections can be found in the attached Appendix A and C for the Pre-Development conditions and well as the Post-Development Conditions. A summary of the intersection capacity is a follows:

US Highway No. 1 and Georgia Ave/Sunrise Boulevard
A.M. Peak Hour (2015)

Approach	Pre-Development	Post-Development
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

US Highway No. 1 and Georgia Ave/Sunrise Boulevard
P.M. Peak Hour (2015)

Approach	Pre-Development	Post-Development
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

US Highway No. 1 and Georgia Ave/Sunrise Boulevard
A.M. Peak Hour (2020)

Approach	Pre-Development	Post-Development
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

US Highway No. 1 and Georgia Ave/Sunrise Boulevard
P.M. Peak Hour (2020)

Approach	Pre-Development	Post-Development
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

Conclusion

The traffic impact of the proposed Rocla Crosstie Manufacturing facility project have been analyzed in both the current and future 2020 horizon year condition for the annual daily traffic as well as the AM and PM peak hour condition in accordance with the requirements of the City of Ft. Pierce City Code Chapter 22.217. The results of the analysis is that the development of the facility will have no effect on the levels of service within the project impact area, and the local roadway network will continue to maintain an acceptable level of service and function properly after the development of the project. The results of the analysis are as follows:

- The Rocla Crosstie facility will have a minimal impact of the Annual Daily traffic condition on the surrounding roadway network and result in no change in Level of Service performance as demonstrated in Table 6 "Roadway Link Analysis (ADT)" found on page 12 of this report.

- The Rocla Crosstie facility will have no impact on the AM or PM peak hour of traffic condition on the surrounding roadway network and result in no change in Level of Service performance as demonstrated in Table 8 "Roadway Network & Impact (PM Peak Hour Directional)" found on page 13 of this report.

- The Rocla Crosstie facility will have no impact on the peak hour of traffic at the surrounding intersections as demonstrated by the Intersection Capacity analysis as provided on page 17 of this report.

- The development of the Rocla Crosstie facility will not result in any roadway links or intersections within the area of study to fall below acceptable levels of service through the 2020 horizon year, thus no transportation capacity related improvements are required.

Submitted By

Stefan K. Matthes
Florida Registration No. 38723

References

1. State of Florida Department of Transportation, Quality/Level of Service Handbook, 2012.

2. Transportation Engineers, Trip Generation, Ninth Edition, 2012.

3. St. Lucie Urban Area Transportation Planning Organization Traffic Counts, Fall 2012, 2013 & 2014.

4. HCS + Highway Capacity Software.

Appendix A

Capacity Analysis Peak Hour (2015)

SHORT REPORT

General Information		Site Information	
Analyst	skm	Intersection	US 1 & Georgia Ave
Agency or Co.	City of Ft. Pierce	Area Type	CBD or Similar
Date Performed	3/29/2015	Jurisdiction	FDOT/CFP
Time Period	AM peak (7:45 - 8:45)	Analysis Year	2015

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	143	15	6	9	2	4	43	893	5	15	737	79
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.73	0.54	0.50	0.56	0.50	0.50	0.77	0.90	0.63	0.63	0.87	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08
Timing	G = 20.0	G = 10.0	G =	G =	G = 6.0	G = 56.5	G =	G =
	Y = 8	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 1.00						Cycle Length C = 112.5		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	196	40			28		56	1000		24	967	
Lane Group Capacity	275	276			135		248	1555		238	1528	
v/c Ratio	0.71	0.14			0.21		0.23	0.64		0.10	0.63	
Green Ratio	0.18	0.18			0.09		0.59	0.50		0.59	0.50	
Uniform Delay d_1	43.5	39.0			47.6		12.2	20.6		12.0	20.4	
Delay Factor k	0.28	0.11			0.11		0.11	0.22		0.11	0.21	
Incremental Delay d_2	8.8	0.2			0.8		0.5	0.9		0.2	0.9	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	52.4	39.3			48.3		12.7	21.5		12.2	21.3	
Lane Group LOS	D	D			D		B	C		B	C	
Approach Delay	50.1			48.3			21.0			21.1		
Approach LOS	D			D			C			C		
Intersection Delay	24.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*skm*	Intersection	*US 1 & Georgia Ave*
Agency or Co.	*City of Ft. Pierce*	Area Type	*CBD or Similar*
Date Performed	*3/29/2015*	Jurisdiction	*FDOT/CFP*
Time Period	*PM peak (4:45 - 5:45)*	Analysis Year	*2015*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	*1*	*1*	*0*	*0*	*1*	*0*	*1*	*2*	*0*	*1*	*2*	*0*
Lane Group	*L*	*TR*			*LTR*		*L*	*TR*		*L*	*TR*	
Volume (vph)	*150*	*7*	*22*	*16*	*12*	*6*	*36*	*943*	*7*	*12*	*987*	*108*
% Heavy Vehicles	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*
PHF	*0.83*	*0.88*	*0.61*	*0.80*	*0.50*	*0.75*	*0.53*	*0.95*	*0.58*	*0.75*	*0.95*	*0.93*
Pretimed/Actuated (P/A)	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*			*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	
Extension of Effective Green	*2.0*	*2.0*			*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	
Arrival Type	*3*	*3*			*3*		*3*	*3*		*3*	*3*	
Unit Extension	*3.0*	*3.0*			*3.0*		*3.0*	*3.0*		*3.0*	*3.0*	
Ped/Bike/RTOR Volume	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Lane Width	*12.0*	*12.0*			*12.0*		*12.0*	*12.0*		*12.0*	*12.0*	
Parking/Grade/Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking/Hour												
Bus Stops/Hour	*0*	*0*			*0*		*0*	*0*		*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08
Timing	G = *18.0*	G = *8.0*	G =	G =	G = *8.0*	G = *55.0*	G =	G =
	Y = *8*	Y = *4*	Y =	Y =	Y = *4*	Y = *4*	Y =	Y =
Duration of Analysis (hrs) = *1.00*						Cycle Length C = *109.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*181*	*44*			*52*		*68*	*1005*		*16*	*1155*	
Lane Group Capacity	*255*	*236*			*115*		*230*	*1562*		*270*	*1541*	
v/c Ratio	*0.71*	*0.19*			*0.45*		*0.30*	*0.64*		*0.06*	*0.75*	
Green Ratio	*0.17*	*0.17*			*0.07*		*0.61*	*0.50*		*0.61*	*0.50*	
Uniform Delay d_1	*43.0*	*39.2*			*48.4*		*12.6*	*19.8*		*10.6*	*21.5*	
Delay Factor k	*0.27*	*0.11*			*0.11*		*0.11*	*0.22*		*0.11*	*0.30*	
Incremental Delay d_2	*9.3*	*0.4*			*2.8*		*0.7*	*0.9*		*0.1*	*2.1*	
PF Factor	*1.000*	*1.000*			*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	
Control Delay	*52.3*	*39.6*			*51.2*		*13.3*	*20.7*		*10.7*	*23.6*	
Lane Group LOS	*D*	*D*			*D*		*B*	*C*		*B*	*C*	
Approach Delay	*49.8*			*51.2*			*20.3*			*23.5*		
Approach LOS	*D*			*D*			*C*			*C*		
Intersection Delay	*25.0*			Intersection LOS						*C*		

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Appendix B

Capacity Analysis Peak Hour (2020)

SHORT REPORT

General Information		Site Information	
Analyst	*skm*	Intersection	*US 1 & Georgia Ave*
Agency or Co.	*City of Ft. Pierce*	Area Type	*CBD or Similar*
Date Performed	*3/29/2015*	Jurisdiction	*FDOT/CFP*
Time Period	*AM peak (7:45 - 8:45)*	Analysis Year	*2020*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	146	15	6	9	2	4	44	915	5	15	756	81
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.73	0.54	0.50	0.56	0.50	0.50	0.77	0.90	0.63	0.63	0.87	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	

Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08
Timing	G = 20.0	G = 10.0	G =	G =	G = 6.0	G = 56.5	G =	G =
	Y = 8	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =
Duration of Analysis (hrs) = 1.00						Cycle Length C = 112.5		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	200	40			28		57	1025		24	992	
Lane Group Capacity	275	276			135		241	1555		231	1528	
v/c Ratio	0.73	0.14			0.21		0.24	0.66		0.10	0.65	
Green Ratio	0.18	0.18			0.09		0.59	0.50		0.59	0.50	
Uniform Delay d_1	43.7	39.0			47.6		12.4	20.8		12.2	20.7	
Delay Factor k	0.29	0.11			0.11		0.11	0.23		0.11	0.23	
Incremental Delay d_2	9.8	0.2			0.8		0.5	1.0		0.2	1.0	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	53.5	39.3			48.3		12.9	21.9		12.4	21.7	
Lane Group LOS	D	D			D		B	C		B	C	
Approach Delay	51.1			48.3			21.4			21.4		
Approach LOS	D			D			C			C		
Intersection Delay	24.8			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	*skm*	Intersection	*US 1 & Georgia Ave*
Agency or Co.	*City of Ft. Pierce*	Area Type	*CBD or Similar*
Date Performed	*3/29/2015*	Jurisdiction	*FDOT/CFP*
Time Period	*PM peak (4:45 - 5:45)*	Analysis Year	*2020*

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	*1*	*1*	*0*	*0*	*1*	*0*	*1*	*2*	*0*	*1*	*2*	*0*
Lane Group	*L*	*TR*			*LTR*		*L*	*TR*		*L*	*TR*	
Volume (vph)	*154*	*7*	*23*	*16*	*12*	*6*	*37*	*967*	*7*	*12*	*1012*	*111*
% Heavy Vehicles	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*	*5*
PHF	*0.83*	*0.88*	*0.61*	*0.80*	*0.50*	*0.75*	*0.53*	*0.95*	*0.58*	*0.75*	*0.95*	*0.93*
Pretimed/Actuated (P/A)	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*	*A*
Startup Lost Time	*2.0*	*2.0*			*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	
Extension of Effective Green	*2.0*	*2.0*			*2.0*		*2.0*	*2.0*		*2.0*	*2.0*	
Arrival Type	*3*	*3*			*3*		*3*	*3*		*3*	*3*	
Unit Extension	*3.0*	*3.0*			*3.0*		*3.0*	*3.0*		*3.0*	*3.0*	
Ped/Bike/RTOR Volume	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Lane Width	*12.0*	*12.0*			*12.0*		*12.0*	*12.0*		*12.0*	*12.0*	
Parking/Grade/Parking	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*	*N*	*0*	*N*
Parking/Hour												
Bus Stops/Hour	*0*	*0*			*0*		*0*	*0*		*0*	*0*	
Minimum Pedestrian Time		*3.2*			*3.2*			*3.2*			*3.2*	

Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08
Timing	G = *18.0*	G = *8.0*	G =	G =	G = *8.0*	G = *55.0*	G =	G =
	Y = *8*	Y = *4*	Y =	Y =	Y = *4*	Y = *4*	Y =	Y =
Duration of Analysis (hrs) = *1.00*						Cycle Length C = *109.0*		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adjusted Flow Rate	*186*	*46*			*52*		*70*	*1030*		*16*	*1184*	
Lane Group Capacity	*255*	*236*			*115*		*223*	*1562*		*263*	*1541*	
v/c Ratio	*0.73*	*0.19*			*0.45*		*0.31*	*0.66*		*0.06*	*0.77*	
Green Ratio	*0.17*	*0.17*			*0.07*		*0.61*	*0.50*		*0.61*	*0.50*	
Uniform Delay d_1	*43.2*	*39.2*			*48.4*		*13.0*	*20.0*		*10.7*	*21.8*	
Delay Factor k	*0.29*	*0.11*			*0.11*		*0.11*	*0.23*		*0.11*	*0.32*	
Incremental Delay d_2	*10.8*	*0.4*			*2.8*		*0.8*	*1.0*		*0.1*	*2.5*	
PF Factor	*1.000*	*1.000*			*1.000*		*1.000*	*1.000*		*1.000*	*1.000*	
Control Delay	*53.9*	*39.7*			*51.2*		*13.8*	*21.1*		*10.8*	*24.3*	
Lane Group LOS	*D*	*D*			*D*		*B*	*C*		*B*	*C*	
Approach Delay	*51.1*			*51.2*			*20.6*			*24.1*		
Approach LOS	*D*			*D*			*C*			*C*		
Intersection Delay	*25.6*			Intersection LOS						*C*		

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HCS+™ Version 5.3

Generated: 3/29/2015 11:47 AM

Appendix C

Traffic Data



U.S. Highway No. 1

U.S. 1 Southbound

7:00–7:15	2	12	94	5
7:15–7:30	0	14	148	2
7:30–7:45	1	19	153	5
7:45–8:00	2	21	168	6
8:00–8:15	3	27	193	5
8:15–8:30	0	18	164	3
8:30–8:45	1	7	212	1
8:45–9:00	7	18	218	7

Georgia Ave. Eastbound

7:00–7:15	1	1	0
7:15–7:30	5	1	1
7:30–7:45	4	1	1
7:45–8:00	2	6	1
8:00–8:15	3	4	1
8:15–8:30	6	0	1
8:30–8:45	5	2	3
8:45–9:00	3	1	8

Georgia Ave. Westbound

7:00–7:15	0	0	1
7:15–7:30	1	0	3
7:30–7:45	0	1	0
7:45–8:00	1	0	1
8:00–8:15	1	1	1
8:15–8:30	4	0	3
8:30–8:45	3	1	1
8:45–9:00	2	2	2

Georgia Avenue

Sunrise Boulevard

Sunrise Boulevard Northbound

7:00–7:15	0	26	0
7:15–7:30	0	20	0
7:30–7:45	0	47	1
7:45–8:00	0	47	1
8:00–8:15	0	27	1
8:15–8:30	0	27	0
8:30–8:45	0	26	1
8:45–9:00	0	26	1

U.S. 1 Northbound

7:00–7:15	5	182	1
7:15–7:30	7	197	1
7:30–7:45	7	210	1
7:45–8:00	14	247	1
8:00–8:15	7	237	2
8:15–8:30	13	198	0
8:30–8:45	9	211	2
8:45–9:00	12	215	5

14–189

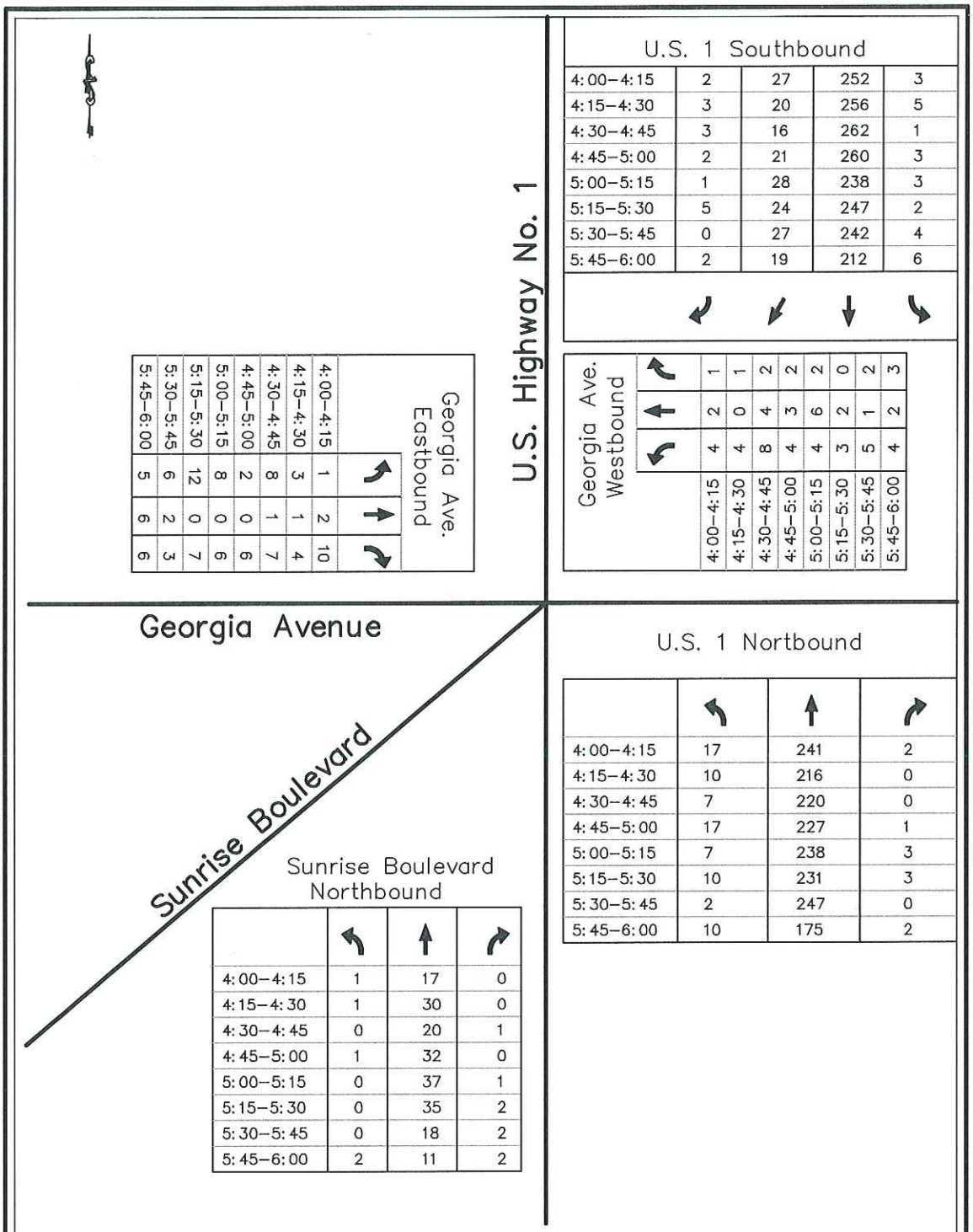
3–26–15

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS
2980 SOUTH 25th STREET
FORT PIERCE, FLORIDA 34981
(772) 464–3537
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4266

AM TRAFFIC COUNTS

14–189

ROCLA CROSSTIES



U.S. 1 Southbound

4:00–4:15	2	27	252	3
4:15–4:30	3	20	256	5
4:30–4:45	3	16	262	1
4:45–5:00	2	21	260	3
5:00–5:15	1	28	238	3
5:15–5:30	5	24	247	2
5:30–5:45	0	27	242	4
5:45–6:00	2	19	212	6

Georgia Ave. Eastbound

4:00–4:15	1	2	10
4:15–4:30	3	1	4
4:30–4:45	8	1	7
4:45–5:00	2	0	6
5:00–5:15	8	0	6
5:15–5:30	12	0	7
5:30–5:45	6	2	3
5:45–6:00	5	6	6

Georgia Ave. Westbound

4:00–4:15	4	2	1	1
4:15–4:30	4	0	1	2
4:30–4:45	8	4	2	2
4:45–5:00	4	3	2	2
5:00–5:15	4	6	2	0
5:15–5:30	3	2	1	2
5:30–5:45	5	1	2	3
5:45–6:00	4	2	3	3

Sunrise Boulevard Northbound

4:00–4:15	1	17	0
4:15–4:30	1	30	0
4:30–4:45	0	20	1
4:45–5:00	1	32	0
5:00–5:15	0	37	1
5:15–5:30	0	35	2
5:30–5:45	0	18	2
5:45–6:00	2	11	2

U.S. 1 Nortbound

4:00–4:15	17	241	2
4:15–4:30	10	216	0
4:30–4:45	7	220	0
4:45–5:00	17	227	1
5:00–5:15	7	238	3
5:15–5:30	10	231	3
5:30–5:45	2	247	0
5:45–6:00	10	175	2

14–189

3–26–15

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS
2980 SOUTH 25th STREET
FORT PIERCE, FLORIDA 34981
(772) 464–3537
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

PM TRAFFIC COUNTS

14–189

ROCLA CROSSTIES

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
Fall 2014

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
US 1	S OF SAEGER AVE to EASY ST	30,989	3,170	1,515	C	0.490	1,372	C	0.444
US 1	EASY ST to MIDWAY RD	29,394	3,170	1,370	C	0.443	1,332	C	0.431
US 1	MIDWAY RD to WEATHERBEE RD	29,824	2,100	1,401	C	0.697	1,418	C	0.705
US 1	WEATHERBEE RD to FARMER'S MARKET RD	29,824	2,000	1,401	C	0.734	1,418	C	0.742
US 1	FARMER'S MARKET RD to EDWARDS RD	29,824	2,000	1,401	C	0.734	1,418	C	0.742
US 1	EDWARDS RD to SAVANNAH RD	30,490	2,000	1,397	C	0.731	1,370	C	0.717
US 1	GARDENIA AVE to VIRGINIA AVE	30,490	2,000	1,397	C	0.731	1,370	C	0.717
US 1	SAVANNAH RD to GARDENIA AVE	30,490	2,000	1,397	C	0.731	1,370	C	0.717
US 1	VIRGINIA AVE to OHIO AVE	27,870	2,000	1,342	C	0.703	1,352	C	0.708
US 1	OHIO AVE to GEORGIA AVE	27,870	1,630	1,342	D	0.823	1,352	D	0.829
US 1	GEORGIA AVE to DELAWARE AVE	24,720	1,630	1,275	D	0.782	1,218	D	0.747
US 1	DELAWARE AVE to CITRUS AVE	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	CITRUS AVE to ORANGE AVE	24,421	1,630	1,216	D	0.746	1,096	D	0.672
US 1	ORANGE AVE to AVENUE A	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	AVENUE A to AE BACKUS AVE	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	AE BACKUS AVE to AVENUE D	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	AVENUE D to SR A1A SOUTH	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	SR A1A SOUTH to AVENUE H	28,000	2,100	1,496	C	0.744	1,378	C	0.686
US 1	AVENUE H to OLD DIXIE HWY	28,000	2,000	1,496	C	0.783	1,378	C	0.721
US 1	OLD DIXIE HWY to AVENUE O	23,190	2,000	1,610	C	0.843	1,258	C	0.659
US 1	AVENUE O to SR A1A NORTH	23,190	2,100	1,610	C	0.801	1,258	C	0.626
US 1	SR A1A NORTH to JUANITA AVE	15,177	2,100	911	C	0.453	729	C	0.363
US 1	JUANITA AVE to ST LUCIE BLVD	15,177	2,100	911	C	0.453	729	C	0.363
US 1	ST LUCIE BLVD to 25TH ST	15,795	2,100	940	C	0.468	902	C	0.449
US 1	25TH ST to INDRIO RD	15,795	2,100	940	C	0.468	902	C	0.449
US 1	INDRIO RD to TURNPIKE FEEDER RD	18,319	2,100	997	C	0.496	991	C	0.493
US 1	TURNPIKE FEEDER RD to INDIAN RIVER C.L.	18,319	2,100	997	C	0.496	991	C	0.493
VETERANS MEMORIAL PKWY	PORT ST LUCIE BLVD to LYNGATE DR	16,500	1,890	1,080	C	0.600	1,027	C	0.571
VETERANS MEMORIAL PKWY	LYNGATE DR to US 1	13,500	1,890	804	C	0.447	780	C	0.433

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				Volume	LOS	V/C	Volume	LOS	V/C
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GEORGIA AVE	25TH ST to OKEECHOBEE RD	4,167	510	230	C	0.920	228	C	0.912
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	4,167	640	230	C	0.719	228	C	0.713
GEORGIA AVE	17TH ST to 13TH ST	4,350	510	257	D	0.504	242	C	0.968
GEORGIA AVE	13TH ST to 7TH ST	1,825	510	106	C	0.424	119	C	0.476
GEORGIA AVE	7TH ST to US 1	1,964	510	119	C	0.476	123	C	0.492
GILSON RD	MARTIN C.L. to BECKER RD	9,200	640	833	F	1.225	849	F	1.249
GILSON RD	BECKER RD to LAKERIDGE DR	9,200	510	833	F	1.543	849	F	1.572
GLADES CUT-OFF RD	RANGE LINE RD to RESERVE BLVD	2,100	800	176	B	0.629	195	B	0.696
GLADES CUT-OFF RD	RESERVE BLVD to COMMERCE CENTER DR	2,768	1,020	375	C	0.521	325	B	0.903
GLADES CUT-OFF RD	CARLTON RD to RANGE LINE RD	2,100	290	176	C	0.607	195	C	0.672
GLADES CUT-OFF RD	COMMERCE CENTER DR to MIDWAY RD	2,290	830	174	C	0.223	159	C	0.204
GLADES CUT-OFF RD	MIDWAY RD to JENKINS RD	6,652	710	445	D	0.627	397	D	0.559
GLADES CUT-OFF RD	JENKINS RD to SELVITZ RD	4,913	830	301	C	0.386	272	C	0.349
GRAHAM RD	KINGS HWY to JENKINS RD	3,500	590	241	C	0.430	210	C	0.375
GREEN RIVER PKWY	MARTIN C.L. to CHARLESTON DR	3,635	800	253	B	0.904	231	B	0.825
GREEN RIVER PKWY	CHARLESTON DR to MELALEUCA BLVD	3,635	800	253	B	0.904	231	B	0.825
GREEN RIVER PKWY	MELALEUCA BLVD to WALTON RD	3,635	800	253	B	0.904	231	B	0.825
HARTMAN RD	OKEECHOBEE RD to PETERSON RD	5,900	640	433	D	0.677	374	D	0.584
HARTMAN RD	PETERSON RD to DELAWARE AVE	5,900	510	433	D	0.849	374	D	0.733
HARTMAN RD	DELAWARE AVE to ORANGE AVE	5,900	710	433	D	0.610	374	D	0.527
HEADER CANAL RD	OKEECHOBEE RD to ORANGE AVE	450	500	32	B	0.200	30	B	0.188
HILLMOOR DR	US 1 to LENNARD RD	3,350	710	213	C	0.609	250	C	0.714
I-95	GATLIN BLVD to ST LUCIE WEST BLVD	72,983	4,580	3,737	C	0.816	3,376	C	0.737
I-95	ST LUCIE WEST BLVD to MIDWAY RD	54,912	4,580	3,088	B	0.919	2,663	B	0.793
I-95	MIDWAY RD to OKEECHOBEE RD	65,849	4,580	3,975	C	0.868	3,227	B	0.960
I-95	OKEECHOBEE RD to ORANGE AVE	45,500	7,320	1,822	B	0.405	1,894	B	0.421

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				Volume	LOS	V/C	Volume	LOS	V/C
EDWARDS RD	SELVITZ RD to 25TH ST	11,925	790	643	C	0.869	606	C	0.819
EDWARDS RD	25TH ST to SUNRISE BLVD	16,738	1,590	885	C	0.738	868	C	0.723
EDWARDS RD	SUNRISE BLVD to OLEANDER AVE	12,500	1,760	613	B	0.438	598	B	0.427
EDWARDS RD	OLEANDER AVE to US 1	8,500	1,590	431	C	0.359	442	C	0.368
EMERSON AVE	INDRIO RD to RUSSOS ROAD	5,113	1,140	413	C	0.516	377	B	0.943
EMERSON AVE	RUSSOS ROAD to INDIAN RIVER COUNTY LINE	5,113	800	413	C	0.516	377	B	0.943
FARMER'S MARKET R	OLEANDER AVE to US 1	1,979	570	115	B	0.348	118	B	0.358
FLORESTA DR/SOUTHBEND BL...	BECKER RD to FLORESTA DR	10,220	830	674	C	0.875	558	C	0.725
FLORESTA DR	OAK RIDGE DR to PORT ST LUCIE BLVD	12,405	830	954	F	1.149	680	C	0.883
FLORESTA DR	THORNHILL DR to CROSSTOWN PKWY	16,500	790	1,231	F	1.558	1,012	F	1.281
FLORESTA DR	PORT ST LUCIE BLVD to THORNHILL DR	16,500	790	1,231	F	1.558	1,012	F	1.281
FLORESTA DR	CROSSTOWN PKWY to PRIMA VISTA BLVD	13,758	830	1,037	F	1.249	783	D	0.943
FLORESTA DR	PRIMA VISTA BLVD to AIROSO BLVD	11,539	830	670	C	0.870	736	C	0.956
FLORESTA DR	BAYSHORE BLVD to SELVITZ RD	3,800	630	327	B	0.884	281	B	0.759
FLORESTA DR	SELVITZ RD to AIROSO BLVD	3,800	790	327	B	0.711	281	B	0.611
FT PIERCE BLVD	EMERSON AVE to INDRIO RD	3,019	630	223	B	0.603	195	B	0.527
GARDENIA AVE	OLEANDER AVE to US 1	2,400	530	166	C	0.461	142	C	0.394
GATLIN BLVD	W OF INTERSTATE 95 to E OF INTERSTATE 95	32,500	2,530	2,446	D	0.967	1,993	D	0.788
GATLIN BLVD	E OF INTERSTATE 95 to SAVAGE BLVD	32,500	2,530	2,446	D	0.967	1,993	D	0.788
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	32,500	2,530	2,446	D	0.967	1,993	D	0.788
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	32,500	2,780	2,446	C	0.906	1,993	B	0.878
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	32,500	2,780	2,446	C	0.906	1,993	B	0.878
GEORGIA AVE	25TH ST to OKEECHOBEE RD	4,000	420	221	C	0.762	219	C	0.755
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	4,000	790	221	B	0.480	219	B	0.476
GEORGIA AVE	17TH ST to 13TH ST	4,400	580	260	C	0.650	245	C	0.613
GEORGIA AVE	13TH ST to 7TH ST	1,864	580	109	C	0.273	121	C	0.303
GEORGIA AVE	7TH ST to US 1	1,960	450	118	C	0.621	123	C	0.647
GILSON RD	MARTIN COUNTY LINE to BECKER RD	10,992	830	904	F	1.089	916	F	1.104
GILSON RD	BECKER RD to LAKERIDGE DR	10,992	630	904	F	1.435	916	F	1.454

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				Volume	LOS	V/C	Volume	LOS	V/C
TULIP BLVD	PAAR DR to DARWIN BLVD	3,300	550	227	C	0.597	217	C	0.571
US 1	MARTIN COUNTY LINE to LENNARD RD	48,802	3,770	2,222	C	0.748	2,613	C	0.880
US 1	LENNARD RD to PORT ST LUCIE BLVD	48,802	3,590	2,222	C	0.785	2,613	C	0.923
US 1	MARIPOSA AVE to JENNINGS RD	33,607	2,940	1,613	B	0.672	1,712	B	0.713
US 1	JENNINGS RD to TIFFANY AVE	33,607	2,940	1,613	B	0.672	1,712	B	0.713
US 1	TIFFANY AVE to WALTON RD	33,607	2,940	1,613	B	0.672	1,712	B	0.713
US 1	WALTON RD to VILLAGE GREEN DR	43,377	2,940	2,350	B	0.979	2,107	B	0.878
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	52,770	3,090	2,803	C	0.934	2,625	C	0.875
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	52,770	2,810	2,803	D	0.998	2,625	D	0.934
US 1	PRIMA VISTA BLVD to RIO MAR DR	35,436	3,090	1,639	B	0.650	1,613	B	0.640
US 1	RIO MAR DR to KITTERMAN RD	29,505	2,810	1,442	C	0.661	1,306	C	0.599
US 1	KITTERMAN RD to SAEGER AVE	29,505	2,940	1,442	B	0.601	1,306	B	0.544
US 1	SAEGER AVE to EASY ST	29,505	2,450	1,442	D	0.589	1,306	D	0.533
US 1	EASY ST to MIDWAY RD	27,709	3,090	1,292	B	0.513	1,255	B	0.498
US 1	MIDWAY RD to WEATHERBEE RD	29,941	1,860	1,407	D	0.756	1,424	D	0.766
US 1	MIDWAY RD to FARMER'S MARKET RD	29,941	1,960	1,407	B	0.902	1,424	B	0.913
US 1	FARMER'S MARKET RD to EDWARDS RD	29,941	1,960	1,407	B	0.902	1,424	B	0.913
US 1	EDWARDS RD to SAVANNAH RD	31,459	1,770	1,441	D	0.814	1,413	D	0.798
US 1	GARDENIA AVE to VIRGINIA AVE	31,459	1,770	1,441	D	0.814	1,413	D	0.798
US 1	SAVANNAH RD to GARDENIA AVE	31,459	1,500	1,441	D	0.961	1,413	D	0.942
US 1	VIRGINIA AVE to OHIO AVE	30,672	1,770	1,477	D	0.834	1,489	D	0.841
US 1	OHIO AVE to GEORGIA AVE	30,672	1,770	1,477	D	0.834	1,489	D	0.841
US 1	GEORGIA AVE to DELAWARE AVE	25,426	1,770	1,311	C	0.986	1,253	C	0.942
US 1	DELAWARE AVE to CITRUS AVE	27,451	1,500	1,391	D	0.927	1,355	D	0.903
US 1	CITRUS AVE to ORANGE AVE	22,239	1,500	1,107	D	0.738	998	D	0.665
US 1	ORANGE AVE to AVENUE A	27,451	1,500	1,391	D	0.927	1,355	D	0.903
US 1	AVENUE A to AVENUE C	27,451	1,500	1,391	D	0.927	1,355	D	0.903
US 1	AVENUE C to AVENUE D	27,451	1,500	1,391	D	0.927	1,355	D	0.903
US 1	AVENUE D to SEAWAY DR	27,451	1,500	1,391	D	0.927	1,355	D	0.903

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				Volume	LOS	V/C	Volume	LOS	V/C
EDWARDS RD	25TH ST to SUNRISE BLVD	16,436	1,680	869	C	0.517	853	C	0.508
EDWARDS RD	SUNRISE BLVD to OLEANDER AVE	15,452	1,760	770	B	0.438	812	B	0.461
EDWARDS RD	OLEANDER AVE to US 1	9,133	1,680	466	C	0.277	475	C	0.283
EMERSON AVE	INDRIO RD to RUSSOS ROAD	5,049	1,140	408	C	0.358	372	B	0.326
EMERSON AVE	RUSSOS ROAD to INDIAN RIVER COUNTY LINE	5,049	800	408	C	0.510	372	B	0.465
FARMER'S MARKET R	OLEANDER AVE to US 1	2,014	570	117	B	0.205	120	B	0.211
FLORESTA DR/SOUTHBEND BL...	BECKER RD to FLORESTA DR	9,991	830	659	C	0.794	546	C	0.658
FLORESTA DR	OAK RIDGE DR to PORT ST LUCIE BLVD	11,945	830	918	F	1.106	655	C	0.789
FLORESTA DR	THORNHILL DR to CROSSTOWN PKWY	15,771	790	1,160	F	1.468	953	F	1.206
FLORESTA DR	PORT ST LUCIE BLVD to THORNHILL DR	15,771	790	1,160	F	1.468	953	F	1.206
FLORESTA DR	CROSSTOWN PKWY to PRIMA VISTA BLVD	13,599	830	1,025	F	1.235	774	D	0.933
FLORESTA DR	PRIMA VISTA BLVD to AIROSO BLVD	11,192	830	650	C	0.783	713	C	0.859
FLORESTA DR	BAYSHORE BLVD to SELVITZ RD	3,881	630	322	B	0.511	352	B	0.559
FLORESTA DR	SELVITZ RD to AIROSO BLVD	3,881	790	322	B	0.408	352	B	0.446
FT PIERCE BLVD	EMERSON AVE to INDRIO RD	2,997	630	221	B	0.351	193	B	0.306
GARDENIA AVE	OLEANDER AVE to US 1	2,400	530	166	C	0.313	142	C	0.268
GATLIN BLVD	W OF INTERSTATE 95 to E OF INTERSTATE 95	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	E OF INTERSTATE 95 to SAVAGE BLVD	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	40,075	2,780	3,016	F	1.085	2,458	C	0.884
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	17,079	2,780	821	B	0.295	804	B	0.289
GEORGIA AVE	25TH ST to OKEECHOBEE RD	3,900	420	241	C	0.574	221	C	0.526
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	3,900	790	241	B	0.305	221	B	0.280
GEORGIA AVE	17TH ST to 13TH ST	4,450	580	263	C	0.453	248	C	0.428
GEORGIA AVE	13TH ST to 7TH ST	1,903	580	111	C	0.191	124	C	0.214
GEORGIA AVE	7TH ST to US 1	1,955	450	118	C	0.262	123	C	0.273
GILSON RD	MARTIN COUNTY LINE to BECKER RD	10,813	830	889	F	1.071	901	F	1.086
GILSON RD	BECKER RD to LAKERIDGE DR	10,813	630	889	F	1.411	901	F	1.430
GLADES CUT-OFF RD	RANGE LINE RD to 0.6 MILE EAST OF RESERVE BL...	1,800	1,120	135	B	0.121	153	B	0.137

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				Volume	LOS	V/C	Volume	LOS	V/C
US 1	MARTIN COUNTY LINE to LENNARD RD	49,454	3,770	2,252	C	0.597	2,648	C	0.702
US 1	LENNARD RD to PORT ST LUCIE BLVD	49,454	3,590	2,252	C	0.627	2,648	C	0.738
US 1	MARIPOSA AVE to JENNINGS RD	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	JENNINGS RD to TIFFANY AVE	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	TIFFANY AVE to WALTON RD	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	WALTON RD to VILLAGE GREEN DR	43,551	2,940	2,359	B	0.802	2,115	B	0.719
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	52,771	3,090	2,803	C	0.907	2,625	C	0.850
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	52,771	2,810	2,803	D	0.998	2,625	D	0.934
US 1	PRIMA VISTA BLVD to RIO MAR DR	36,045	3,090	1,667	B	0.539	1,641	B	0.531
US 1	RIO MAR DR to KITTERMAN RD	30,326	2,810	1,482	C	0.527	1,342	C	0.478
US 1	KITTERMAN RD to SAEGER AVE	30,326	2,940	1,482	B	0.504	1,342	B	0.456
US 1	SAEGER AVE to EASY ST	30,326	2,450	1,482	D	0.605	1,342	D	0.548
US 1	EASY ST to MIDWAY RD	28,799	3,090	1,342	B	0.434	1,305	B	0.422
US 1	MIDWAY RD to WEATHERBEE RD	30,913	1,860	1,452	D	0.781	1,470	D	0.790
US 1	MIDWAY RD to FARMER'S MARKET RD	30,913	1,960	1,452	B	0.741	1,470	B	0.750
US 1	FARMER'S MARKET RD to EDWARDS RD	30,913	1,960	1,452	B	0.741	1,470	B	0.750
US 1	EDWARDS RD to SAVANNAH RD	32,286	1,770	1,479	D	0.836	1,451	D	0.820
US 1	GARDENIA AVE to VIRGINIA AVE	32,286	1,770	1,479	D	0.836	1,451	D	0.820
US 1	SAVANNAH RD to GARDENIA AVE	32,286	1,500	1,479	D	0.986	1,451	D	0.967
US 1	VIRGINIA AVE to OHIO AVE	31,306	1,770	1,508	D	0.852	1,519	D	0.858
US 1	OHIO AVE to GEORGIA AVE	31,306	1,770	1,508	D	0.852	1,519	D	0.858
US 1	GEORGIA AVE to DELAWARE AVE	26,466	1,770	1,365	D	0.771	1,304	C	0.737
US 1	DELAWARE AVE to CITRUS AVE	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	CITRUS AVE to ORANGE AVE	23,186	1,500	1,154	D	0.769	1,040	D	0.693
US 1	ORANGE AVE to AVENUE A	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE A to AVENUE C	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE C to AVENUE D	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE D to SEAWAY DR	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	SEAWAY DR to AVENUE H	26,500	2,060	1,518	B	0.737	1,405	B	0.682

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

DRAFT

Kimley»Horn

To: Kori Benton, Senior Planner
Planning Department
City of Fort Pierce

From: Nicholas J. Mora, P.E.
Kimley-Horn and Associates, Inc.

Date: DRAFT – May 29, 2015

Re: **ROCLA Crosstie Facility**
Review of Traffic Impact Study

Kimley-Horn has performed a review of the traffic impact study (dated April 2015) prepared by Culpepper & Terpening, Inc. for the above-mentioned project in accordance with Section 22-217 and Section 22-218 of the City's Land Development Code. The project's development program includes a 16,850 square foot railroad crosstie manufacturing building as well as a separate 2,625 square foot office building. Please find below our review comments pertaining to the impacts to transportation facilities:

1. According to the TPO's Traffic Counts and LOS Report, the ADT volume for US1 north of Georgia Avenue is 24,720 and the ADT volume for US1 south of Georgia Avenue is 27,870. It appears Table 3 has these volumes reversed. Please correct. This comment also applies to other tables showing US1 ADT.
2. Does the applicant manage other similar facilities that can confirm the trip generation rates and estimates shown on page 9?
3. The ADT calculation on page 9 is incorrect. This equation results in 124 trips per day. Please correct and incorporate throughout the report's calculations.
4. The report assumes that no traffic activity associated with the site is expected to occur during the typical PM peak hour timeframe (between 4pm and 6pm). Please confirm this is accurate.
5. When will truck deliveries typically be made to the facility? Are they required to occur outside of typical morning (7am to 9am) and afternoon (4pm to 6pm) peak traffic periods?
6. Since no committed traffic is included within the calculations, a 0.50% growth rate seems too low. We recommend utilizing at least a 2% annual growth rate.
7. Please explain how the 7,909 value was calculated in Table 6.
8. Please confirm how all of the ADT % Impact calculations were computed in Table 7. Based on the values in the table, the % impact on South 3rd Street should be 0.84% (calculated as 112 ÷ 13,320).

DRAFT

9. The intersection of US1 & Georgia Avenue is a 5-leg intersection; however, it was modeled in the HCS analysis as a 4-leg intersection as the eastbound leg of Georgia Avenue and the northeastbound leg of Sunrise Boulevard were combined. This method is acceptable because of the nominal volumes along the eastbound leg of Georgia Avenue; however please confirm whether existing signal timing information were obtained from the maintaining agency and incorporated into the HCS analysis.

Thank you for the opportunity to assist the City of Fort Pierce in reviewing this project. Please contact us if you have any questions or need additional information.



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
NICHOLAS J. MORA, P.E.
P.E. LICENSE NUMBER 70697
1823 SE FORT KING STREET, SUITE 200
OCALA, FL 34471
(352) 438-3000
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF
FORT PIERCE
US HIGHWAY 1 AND
GEORGIA AVE INTERSECTION STUDY

WB-67 TURNING EXHIBIT
LEFT FROM GEORGIA AVE

SHEET NO.
A

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
NICHOLAS J. MORA, P.E.
P.E. LICENSE NUMBER 70697
1823 SE FORT KING STREET, SUITE 200
OCALA, FL 34471
(352) 438-3000
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF
FORT PIERCE
US HIGHWAY 1 AND
GEORGIA AVE INTERSECTION STUDY

WB-67 TURNING EXHIBIT RIGHT FROM GEORGIA AVE (DESIGN)

SHEET NO.
C

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
NICHOLAS J. MORA, P.E.
P.E. LICENSE NUMBER 70697
1823 SE FORT KING STREET, SUITE 200
OCALA, FL 34471
(352) 438-3000
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF
FORT PIERCE
US HIGHWAY 1 AND
GEORGIA AVE INTERSECTION STUDY

WB-67 TURNING EXHIBIT RIGHT FROM GEORGIA AVE (ACTUAL)

SHEET NO.
B



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
NICHOLAS J. MORA, P.E.
P.E. LICENSE NUMBER 70697
1823 SE FORT KING STREET, SUITE 200
OCALA, FL 34471
(352) 438-3000
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF
FORT PIERCE
US HIGHWAY 1 AND
GEORGIA AVE INTERSECTION STUDY

WB-67 TURNING EXHIBIT
LEFT FROM US-1

SHEET NO.
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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
NICHOLAS J. MORA, P.E.
P.E. LICENSE NUMBER 70697
1823 SE FORT KING STREET, SUITE 200
OCALA, FL 34471
(352) 438-3000
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF
FORT PIERCE
US HIGHWAY 1 AND
GEORGIA AVE INTERSECTION STUDY

WB-67 TURNING EXHIBIT
RIGHT FROM US-1 (DESIGN)

SHEET NO.
F



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
NICHOLAS J. MORA, P.E.
P.E. LICENSE NUMBER 70697
1823 SE FORT KING STREET, SUITE 200
OCALA, FL 34471
(352) 438-3000
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF
FORT PIERCE
US HIGHWAY 1 AND
GEORGIA AVE INTERSECTION STUDY

WB-67 TURNING EXHIBIT
RIGHT FROM US-1 (ACTUAL)

SHEET NO.
E

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Technical Review Comments – Rocla Concrete Planned Development - 600 S 3rd Street

1) FP Planning
2) FP Code Compliance
3) FP Engineering
4) FPUA
5) SLC Engineering

100 NORTH U.S. HIGHWAY 1 ◊ P.O. BOX 1480 ◊ FORT PIERCE, FL 34954-1480 ◊ 772-467-3000 ◊ FAX: 772-466-5808
WWW.CITYOFFORTPIERCE.COM

CITY OF FORT PIERCE

PLANNING DEPARTMENT

COMPREHENSIVE PLANNING ◊ DEVELOPMENT REVIEW
HISTORIC PRESERVATION ◊ URBAN DESIGN ◊ URBAN FORESTRY ◊ ZONING

May 1, 2015

Stef Matthes, P.E.
Culpepper and Terpening, Inc.
Consulting Engineers and Land Surveyors
2980 South 25th Street
Ft. Pierce, FL 34981

Re: Technical Review – Rocla Concrete
Planned Development - 300 S 3rd Street

Dear Mr. Matthes, PE,

The following are technical review comments from the Planning Department's review of the application for Planned Development to construct a concrete railroad tie manufacturing facility:

Consistency Review with the Planned Development Zone (PD) Submittal Requirements & Purpose

The Site Plan document contains many of the required components necessary within the "Written documents" requested for the Planned Development, however they should be integrated into a Rocla Planned Development Booklet which identifies and presents the noted components below:

a. Project Narrative: A statement describing the Planned Development. This statement should include a description of the character of the proposed development as it relates to the development objectives of the City and the City's Comprehensive Plan as well as the applicant's intentions with regard to the future selling or leasing of all or portions of the Planned Development, such as land areas and dwelling units.

b. Unified Control: Material which presents unified control of the entire area within the proposed Planned Development.

c. Phasing: A development phasing schedule indicating:

1. The approximate date when construction of the project can be expected to begin.

2. The number of phases in which the project will be built and the approximate date when construction of each phase can be expected to begin and completed.

3. A general description of the buildings and streetscapes including standards for height, building coverage, parking areas, and public improvements proposed for each phase of the development.

d. Quantitative data for the following: Total number and type of dwelling units; parcel sizes; proposed lot coverage of buildings and structures; residential gross densities; total amount of open space; and the total amount of nonresidential acreage (including a separate figure for commercial and industrial acreage).

e. A list of any exceptions from the standard zoning ordinance and land development code for any features of the proposed development plan.
(-i.e. front setback/build to line, driveway widths, lot coverage, impervious, retention areas, landscaping, outdoor storage, etc.)

f. Agreements, provisions and covenants which govern the use, maintenance and continued protection of the Planned Development and any of its common open space or other shared areas.

(A description of the intended timeline for operation of the facility, especially at the extended hour capacity presented, is requested.)

1) Pursuant to 22-40 (a), the purpose of the PD district furthers the follow components. Please provide any aspects or objectives of the project which may further these goals:

(2) Encourage structures which result in an organized, compatible development within and with surrounding land uses in density and intensity of use.

(4) Encourage the preservation of environmental assets and natural amenities as scenic and functional open-space areas.

(9) Permit site specific requirements based on the unique characteristics of the individual site.

(10) Permit site specific limitations where necessary to protect public health, safety, or welfare, or for the protection or preservation of lands either internal or external to the Planned Development.

2) Pursuant to 22-40 (b), the following components should be considered and accounted for within the PD narrative and presented plan:

(1) Comprehensive Plan Consistency. Any residential, commercial, industrial, or public land uses and structures are permitted in this district, provided the proposed development is shown to be consistent with the goals, objectives and policies of the comprehensive plan, and consistent with the future land use element, and the standards and criteria contained in the following sections, unless a corresponding amendment to the Comprehensive Plan is also adopted.

(3) Open space. In all Planned Developments at least twenty (20%) per cent of the site shall be devoted to open space, regardless of project size or intended use; it may include vegetated areas or urban areas unencumbered by an impervious surface, but shall exclude aquatic areas.

(8) Additional requirements. The City Commission may also establish additional requirements which it considers necessary to assure that a Planned Development conforms to the intent of this section.

Technical Review – Supplementary Regulation Compliance

1) Please identify the applicant's intentions to combine and subdivide the parcels contributing to the site make up, or if a minor replat will be filed to establish the proposed project boundaries.

2) Please provide a tree survey for the boundaries of the proposed project.

3) Please advise on the design intent of the selected building placement, as it relates to the provision of consistent spatial order of streets, and accommodation of human scale and pedestrian activity.

4) Please advise further on the presented quantity of parking spaces proposed for the development as staff notes the building breakdown and required parking calculations as follows:
    a. 16,950 sq. ft. @ 1 space/600 sq. ft. = 28 spaces
    b. 2,625 sq. ft. @ 1 space / 300 sq. ft. = 9 spaces

5) Within the PD narrative, please advise on the justification for the drive-aisle widths at the presented sizing, and connections to abutting sites. If shared drive/access easements exist, or will be established, please incorporate such components into the narrative.

6) Please revise the site plan to include a sidewalk along S. 3rd Street, and a connection to and from said sidewalk and building entrances, pursuant to City Code Section 22-62.

7) Please provide the required quantity of bicycle parking spaces pursuant to City Code Section 22-60.

8) *Pursuant to City Code Section 17-34 (3),* All retention and/or detention areas shall be located at the rear of the property away from public right-of-ways and landscaped with at least a thirty-six-inch hedge around the perimeter so as to screen such areas from the view of vehicles and/or pedestrians using the public right-of-ways. A portion of the southern retention area extends towards the 3rd Street right-of-way.

9) Please advise on the proposed material for establishment of the stabilized storage area. Furthermore, please describe the intended use of the storage area, as it relates to outdoor storage of materials, products, and equipment, including the potential noise and dust from use of this area in an industrial capacity.

10) The proposed Site Plan presents a calculation of 72% open space. Please note that open space includes vegetated areas, or urban areas unencumbered by an impervious surface. Please advise further on this presented percentage of the site devoted to open space.

11) The presented Site Plan notes a maximum building height of 38 ft., however the elevation sheet provided suggests that the cement storage bin will have a peak height of roughly 46 ft.

12) *Pursuant to City Code Section 22-187 (7) interior vehicular use areas.* The following are standards relating to landscaping of interior vehicular use areas:

a. Lots with vehicular use areas that are four thousand (4,000) or more square feet in size shall have at least one square foot of interior landscaping for each fifteen (15) square feet of vehicular use area, except that areas in an I-1 or I-2 zone shall only be required to have at least one square foot of interior landscaping for each thirty (30) square feet of vehicular use area. Each separate landscaped area shall be curbed and contain a minimum of one hundred (100) square feet of area and shall be at least ten (10) feet wide and ten (10) feet deep exclusive of curbing in all locations. Progressive urban parking area designs may be used to provide adequate space for multiple tree plantings and allow for proper tree root development so shade trees can grow and develop large canopies to reduce parking lot heat islands.
b. Interior landscaping shall include an average of at least one tree for each one hundred (100) square feet of required landscaped area. The remainder of the required landscaped area shall be landscaped with grass, ground cover or other landscaped treatment. Such landscaped areas shall be located in such a manner as to divide and break up the expanse of paving and at strategic points to guide traffic flow and direction.

The submitted Landscape plan affirms the requirements for 3,159 sq. ft. of interior vehicular use landscape area, however the plan does not reflect the implementation of such areas. Furthermore, the presented site plan presents a required interior landscape area of 516 sq. ft., which is based upon the site retaining a I-1 zoning district. Please provide clarification, and justification of the utilized figures within the PD narrative.

Structure Design Comments:

1) City of Fort Pierce Code Section 22-59(g) presents the required *Design review guideline for the subject development, please advise on the presented design which regards to each of the noted components, or update the site design with regards to the following:*

(1) Roofs
c. The use of deep (32"—40") overhangs and, where appropriate, detailed eave brackets, are strongly encouraged. Variation in roof heights or articulation of a flat roof overhang along the

facade is encouraged to add visual interest to a streetscape and delineation of activity within a structure.
(2)Entrances.
a. Buildings shall have architectural features such as porches or roof overhangs that delineate or emphasize entrances. Covered entrances shall be proportioned to human scale and follow logic of design relative to the building. This entrance shall face the public right-of-way, be well-defined architecturally and readily visible to pedestrian and vehicular traffic.
b. To provide for consistent spatial order of streets, and to accommodate a human scale and pedestrian activity, the inside line of the front yard (setback) shall be considered a frontage line. Exceptions to this requirement may be granted for development in the following zoning districts: OS-1 (Open Space Recreation), OS-2 (Open Space Conservation), I-1 (Light Industrial), CP-1 (Commercial Parkway), C-6 (Marine Commercial), and C-3 (General Commercial) on properties backing onto a highway and fronting an internal access road.
(3) Windows.
d. Windows must be placed on elevations that face the public right-of-way and must be in scale and compatible with the architectural style of the building.
e. Large expanses of wall without windows or detail that face the public right-of-way are prohibited.
(4) Elevations
b. Elevations adjacent to a public right-of-way shall be considered as a building front and treated as such with appropriate entrances, fenestration or detailing.
(7)Landscaping.
a. All landscape designs and drawings shall conform to chapter 22, article XII of this Code.
b. Landscaping for the proposed development shall provide visually harmonious and compatible settings for structures on the same lot as well as adjoining or nearby lots and shall blend with the surrounding landscape. The scale of the proposed landscaping shall be in proportion to the building and to the human scale of the streetscape.

Traffic Impact Review:

The Planning Department will be coordinating further with St. Lucie County and the St. Lucie County TPO to review the submitted analysis further. The request may be filed to utilize a consulting traffic engineer to review and verify the impacts and analysis presented. We will provide additional information as further coordination commences.

1) The traffic study suggests that US Highway 1, within the study area, contains a continuous common turn lane. FDOT has established multiple medians and defined turn lanes assigned for use by specified travel directions.

2) Please provide clarification as to the incorporation of the administrative staff into the presented trip generation data.

3) Please provide guidance as to the potential impacts of the proposed railway trips/deliveries upon the surrounding roadway networks and railroad crossings (Orange Avenue), including the scheduled hours for such deliveries.

4) Please provide turn data for the 3rd Street/Georgia Avenue & Georgia Avenue/US Highway 1 intersections accounting for current conditions, in order to ensure safe navigation within established travel lanes.

5) Table 8 indicates that the PM Peak Post-Development Conditions for US Highway 1, north of Georgia Avenue, will improve to an LOS of B. Please provide further clarification of this scenario.

If deemed necessary, please provide a written response to each comment in order to expedite the review of any subsequent submittals. Please contact me should you have any questions regarding the project at (772) 467-3739 or by e-mail: kbenton@city-ftpierce.com.

Sincerely,



Kori Benton
Historic Preservation Officer

CITY OF FORT PIERCE

COMMUNITY RESPONSE DIVISIONS

MARGARET M. ARRAIZ, CODE COMPLIANCE MANAGER

Protecting the health, safety and welfare of our community

TO:	Kori Benton, Senior Planner
FROM:	Peggy Arraiz, Code Compliance Manager
RE:	Technical Review Project: # 15-42000001 Rocla Crosstie Facility – Development Plan
DATE:	May 11, 2015

Code Enforcement has reviewed the above project and has the following comments:

- There are no current code violations or outstanding balances at this location.
- Code is very concerned about the dust that is created by such a facility. We have had past code enforcement issues with the Cemex facility, which is adjacent to this proposed development. Specifically when cleaning the silos, which is occasionally necessary, it creates a large amount of dust that cannot be completely contained. It created a health hazard to the employees of neighboring businesses and caused damage to buildings and vehicles. We had to involve the DEP in this matter due to the air pollution problem. I have very serious concerns that allowing such a heavy industrial use so close to US 1, Citrus Ave and the downtown area will endanger the comfort, repose, health and safety of the residents in violation of Sec. 16-46 of the City Code of Ordinances.
- *Nuisance as a condition* means a certain state of being or situation located on property which:

  (1) Injures or endangers the comfort, repose, health or safety of any person; or

  (5) Renders other persons insecure in life or the use of property; or

  (6) Interferes with the comfortable and quiet enjoyment of life or property; or

  (7) Tends to or could depreciate the value of property of any persons; or

  (11) Any noises or vibrations, including animal noises, which disturb the peace of the surrounding area or are otherwise unlawful; or

  (12) Any foul, offensive or unlawful emissions, odors or stenches and the causes thereof; or

  (14) Dense smoke, noxious or lethal fumes, lethal gas, soot or cinders; or

100 N. US Hwy 1 ⌑ P.O. Box 1480 ⌑ Fort Pierce, FL 34954-1480
P: 772-467-3148 ⌑ F: 772-468-0457 ⌑ E-Mail: parraiz@city-ftpierce.com
www.cityoffortpierce.com

CITY OF FORT PIERCE
DEPARTMENT OF ENGINEERING

Roadway Design, Engineering Reviews, Stormwater Utility Management, Project Management, Traffic Control and Maintenance

INTEROFFICE MEMORANDUM

TO: Kori Benton, Historic Preservation Officer

FROM: John R. Andrews, P.E., City Engineer

SUBJECT: **Rocla Crosstie Facility – 3rd Street**
TRC Project No. 15-42000001

RECEIVED
APR 15 2015
CITY OF FORT PIERCE
PLANNING & ZONING

DATE: April 14, 2015

cc:

Attachment(s):

This is to advise you that we have completed the review of the following documents as received April 8, 2015:

- ☑ Rezoning and Site Plan Application Package
- ☐ Test Reports & Related Documents
- ☐ Record Drawings
- ☐ Clearances from all applicable Local, State and Federal Agencies
- ☐ P/D Drawings & Approved Site Plan
- ☐ Certificate of Completion
- ☐ Permits from applicable Local, State & Federal Agencies

Based on our reviews and appropriate site final inspection, we ☑ Recommend; ☐ Do Not Recommend

☑ Rezoning/Site Plan Approval ☐ Building Permit ☐ C/O

Developer, Owner, Engineer, Contractor and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for the compliance with other City department requirements and all approved documents, as well as Local, State and Federal regulations. The development requirements for this project may necessitate additional construction requirements that are not subject to this department's review for approval.

☑ See attached for advisory comments

P.O. BOX 1480 ◊ FORT PIERCE, FL 34954-1480 ◊ 772-467-3774

The following are advisory comments and as such do not require addressing at this time:

1. Being as South 3rd Street has a substandard right-of-way width of 40' the applicant has depicted the required 10' right-of-way easement across the limits of his property along South 3rd Street. A sketch and description of this easement along with a recent owners and encumbrances search will be required prior to issuance of a Site Work Permit. Specific information may be obtained from the Planning and Zoning Department.
2. At time of Building Permit submittal, please identify the material that will be utilized for the stabilized area. Please be aware that asphalt millings will not be permitted.
3. The environmental report indicates that one active gopher tortoise burrow was located on site. Prior to any land clearing operations, the applicant shall forward a copy of the FFWCC Relocation Permit.

JRA/tst

Fort Pierce Utilities Authority

PD – Rocla Crosstie Facility – 300 S. 3rd. Street – (Kori Benton)

- Water/Wastewater Engineering: Approved with comments- Please submit a plan review application and Utility plans to FPUA. Site plan does not indicate water and sewer connections to the proposed development. What is your fireflow requirement to the site? An additional water main loop may be required if you have a large fireflow requirement.
- Electric and Gas Engineering: Approved

Fort Pierce Utilities Authority

PD – Rocla Crosstie Facility – 300 S. 3rd Street – (Kori Benton)

Water/Wastewater Engineering: Approved with comments- A transition manhole will be required and meters need to be located near the frontage property line.

Electric and Gas Engineering: Approved

St. Lucie County

ROCLA Concrete Tie
South 3rd Street
April 9, 2015
Site Plan/Re-zoning

St. Lucie County Public Works/Engineering Comments

1. South 3rd Street is subject to the jurisdiction of the City of Ft. Pierce.
2. It is noted that the City of Ft. Pierce may require the applicant to construct a concrete sidewalk along South 3rd Street.
3. The applicant is advised that the City may require an additional right of way easement for South 3rd Street.
4. It is noted that the site plan did not indicate finish floor elevations for the proposed vertical structures.
5. The current property configuration does not match the property appraiser map. Was a legal lot split approved by the City?
6. The applicant is advised that the St. Lucie County Fire District requires a separate development review application and fee. Contact Captain Derek Fox.
7. What is the height of the cement storage bins?

Ron Harris, PLS
County Surveyor
772 462-1721

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS

C&T Project No.:14-189
File: CFtP Planning
Sender's Email: smatthes@ct-eng.com

May 29, 2015

VIA: ***Hand Delivery***

Mr. Kori Benton, Planner
City of Ft. Pierce Planning Division
100 North US Highway 1
Ft. Pierce, FL 34950

RE: Rocla Crosstie Facility
TRC Project No. 15-42000001
Re-submittal Planned Development Site Plan documents and Response to Comments

Dear Mr. Benton:

We are in receipt of your comment letter dated May 1, 2015. We have reviewed the comments, along with the comments received by other members of the TRC and respectfully re-submit the following materials for the Planning & Zoning Board consideration:

1. One original and nine Copies of the Planned Development Booklet;
2. One original and nine Copies of the Environmental Assessment Report;
3. One original and nine Copies of the revised Traffic Impact Study;
4. One original and nine Copies of the revised Location Map/Project Aerial Exhibit/Open Space Exhibit;
5. One original and nine copies of the revised Boundary, Topographic and Tree Survey;
6. One original and nine copies of the Revised Site Plan;
7. One original and nine copies of the revised Preliminary Landscape Plan;
8. One original and nine copies of the revised Preliminary Storm Drainage Plan;
9. One original and none copies of the revised Preliminary Site Lighting/Photometric Plan;
10. One original and nine copies of the Design Review Package with the following additional data:
    a. Design Narrative & Site Analysis;
    b. Existing & neighboring site photos & photo's of buildings that service as precedent;
    c. Color Rendering w/Sample Board data;
    d. Architectural Elevations.
11. (1) CD of submitted materials

Our itemized responses to the comments received are provided as follows:

Technical Review – Supplementary Regulation Compliance

1. The Site Plan document contains many of the required components necessary within the "Written documents" requested for the Planned Development, however they should be

integrated into a Rocla Planned Development Booklet which identifies and presents the noted components below:

a. Project Narrative: A statement describing the Planned Development. This statement should include a description of the character of the proposed development as it relates to the development objectives of the City and the City's Comprehensive Plan as well as the applicant's intentions with regard to the future selling or leasing of all or portions of the Planned Development, such as land areas and dwelling units.

Response: The project narrative has been expanded to include the development objectives of the City, and the City's Comprehensive Plan. The applicant, FEC will retain ownership of the property within the Planned Development. Future changes, if any, would be subject to an amendment to the Planned Development.

b. Unified Control: Material which presents firm evidence of unified control of the entire area within the proposed Planned Development in a manner approved by the City Attorney.

Response: A letter of unified control will be provided by the owner prior to City Commission approval. Please provide us with a form that is acceptable to the City Attorney.

c. Phasing: A development phasing schedule indicating:
   1) The approximate date when construction of the project can be expected to begin.
      Response: Construction is anticipated to commence in late August 2015.
   2) The number of phases in which the project will be built and the approximate date when construction of each phase can be expected to begin and completed.
      Response: The project will be constructed in one phase. The work is anticipated to commence in August 2015 and be completed January 2016.
   3) A general description of the buildings and streetscapes including standards for height, building coverage, parking areas, and public improvements proposed for each phase of the development.
      Response: The general description requested will be included Rocla Planned Development Booklet.

d. Quantitative data for the following: Total number and type of dwelling units; parcel sizes; proposed lot coverage of buildings and structures; residential gross densities; total amount of open space; and the total amount of nonresidential acreage (including a separate figure for commercial and industrial acreage).

Response: The quantitative data provided in the Site plan will be incorporate into the Rocla Planned Development Booklet.

e. A list of any exceptions from the standard zoning ordinance and land development code for any features of the proposed development plan. (i.e. front setback/build to line, driveway widths, lot coverage, impervious, retention areas, landscaping, outdoor storage, etc.)

Response: A list of the exceptions from the standard zoning ordinance will be incorporate into the Rocla Planned Development Booklet.

f. Agreements, provisions and covenants which govern the use, maintenance and continued protection of the Planned Development and any of its common open space or other shared areas.

Response: The developer of the project, Rocla Concrete Tie, Inc. will enter into a specific lease agreement with the property owner, Florida East Coast Railroad. The

lease agreement will be limited to the uses proposed by the project and terminate upon completion of the lease. It will be the responsibility of Rocla Concrete Tie, Inc. to maintain the premises throughout the duration of the lease.

g. A description of the intended timeline for operation of the facility, especially at the extended hour capacity presented, is requested.

Response: The proposal hours of operations will be provided in the Rocla Planned Development Booklet.

1) Pursuant to 22-40 (a), the purpose of the PD district furthers the follow components. Please provide any aspects or objectives of the project which may further these goals:

(2) Encourage structures which result in an organized, compatible development within and with surrounding land uses in density and intensity of use.

Response: The site design of building placement incorporates functionality for the intended use and is predicated on the site configuration. The placement of the buildings on site gives a welcoming commercial feel to this industrial project. The buildings are set back off the street to allow for parking and landscaping which both help guide a person to the facility. Orienting the buildings so the shorter widths are parallel to the street help reduce the scale of the facades from the street which creates a more approachable scale to the pedestrian. The frontage along South 3rd Street limits flexibility in siting, while providing ease of access, parking and security. Scale and order will be established with architecture and landscaping.

(4) Encourage the preservation of environmental assets and natural amenities as scenic and functional open-space areas.

Response: The current site is in general disrepair. The original uses were for railway maintenance and are no longer in use. The development of the project will remove the existing overgrown exotic vegetation and replace it with native landscaping that will enhance the overall visual character and provide environmental benefits.

(9) Permit site specific requirements based on the unique characteristics of the individual site.

Response: The site is located on property that was used for railway maintenance. The redevelopment of the property will provide new function and building aesthetics that enhance the overall character of the area. Native canopy trees and palms, together with shrubs and groundcovers, will further increase the character of this degraded site.

(10) Permit site specific limitations where necessary to protect public health, safety, or welfare, or for the protection or preservation of lands either internal or external to the Planned Development.

Response: The project will not result in any uses that endanger the public health, safety of welfare. The project will remove exotic vegetation and replace it with landscaping the meets the goals and objectives of the City's vision and Comprehensive plan.

2) Pursuant to 22-40 (b), the following components should be considered and accounted for within the PD narrative and presented plan:

(1) Comprehensive Plan Consistency. Any residential, commercial, industrial, or public land uses and structures are permitted in this district, provided the proposed development is

shown to be consistent with the goals, objectives and policies of the comprehensive plan, and consistent with the future land use element, and the standards and criteria contained in the following sections, unless a corresponding amendment to the Comprehensive Plan is also adopted.
Response: This will be added to the Rocla Planned Development Booklet.

(3) Open space. In all Planned Developments at least twenty (20%) per cent of the site shall be devoted to open space, regardless of project size or intended use; it may include vegetated areas or urban areas unencumbered by an impervious surface, but shall exclude aquatic areas.
Response: The minimum 20% open space is now provided on the Site Plan as well as the General Location Map, Open Space & Site Aerial Exhibit.

(8) Additional requirements. The City Commission may also establish additional requirements which it considers necessary to assure that a Planned Development conforms to the intent of this section.
Response: So noted.

Technical Review – Supplementary Regulation Compliance

1) Please identify the applicant's intentions to combine and subdivide the parcels contributing to the site make up, or if a minor replat will be filed to establish the proposed project boundaries.

Response: The property will be leased from FEC who will retain ownership. The lease agreement between FEC and Rocla will establish the proposed project boundaries. A replat is not anticipated as the lease agreement will have a duration within the terms.

2) Please provide a tree survey for the boundaries of the proposed project.

Response: A tree survey was included on the Boundary, Topographic Survey and Tree Survey.

3) Please advise on the design intent of the selected building placement, as it relates to the provision of consistent spatial order of streets, and accommodation of human scale and pedestrian activity.

Response: The site design of building placement incorporates functionality for the intended use and is predicated on the site configuration. The placement of the buildings on site gives a welcoming commercial feel to this industrial project. The buildings are set back off the street to allow for parking and landscaping which both help guide a person to the facility. Orienting the buildings so the shorter widths are parallel to the street help reduce the scale of the facades from the street which creates a more approachable scale to the pedestrian. The frontage along South 3rd Street limits flexibility in siting, while providing ease of access, parking and security. Scale and order will be established with architecture and landscaping.

4) Please advise further on the presented quantity of parking spaces proposed for the development as staff notes the building breakdown and required parking calculations as follows:
    a. 16,950 sq. ft. @ 1 space/600 sq. ft. = 28 spaces
    b. 2,625 sq. ft. @ 1 space / 300 sq. ft. = 9 spaces

Response: The parking calculations have been adjusted to meet the requirements provided above. As such we have added 4 parking spaces to the Site Plan.

5) Within the PD narrative, please advise on the justification for the drive-aisle widths at the presented sizing, and connections to abutting sites. If shared drive/access easements exist, or will be established, please incorporate such components into the narrative.

Response: The drive isle is existing and does indeed provide joint access to the neighboring property to the north. This will be elaborated in the Rocla Planned Development Booklet. An access easement will be provided with the construction plans submittal.

6) Please revise the site plan to include a sidewalk along S. 3rd Street, and a connection to and from said sidewalk and building entrances, pursuant to City Code Section 22-62.

Response: It is our opinion that the sidewalk will not have any function in this location as there is no interconnectivity and this location is industrial. We have however provided the R/W easement for possible future improvements to the roadway and will provide payment in lieu of construction.

7) Please provide the required quantity of bicycle parking spaces pursuant to City Code Section 22-60.

Response: For industrial uses, one bicycle parking space shall be provided for every 20 motor vehicle spaces. There are 37 vehicle parking spaces proposed which will require only two bicycle parking spaces. The proposed anchored bike parking rack will hold 12 bikes total.

8) *Pursuant to City Code Section 17-34 (3),* All retention and/or detention areas shall be located at the rear of the property away from public right-of-ways and landscaped with at least a thirty-six-inch hedge around the perimeter so as to screen such areas from the view of vehicles and/or pedestrians using the public right-of-ways. A portion of the southern retention area extends towards the 3rd Street right-of-way.

Response: The retention area in the south west corner of the site has been revised to remove it from the proposed R/W easement. Additionally, a 36" hedge has been added to the landscape plans.

9) Please advise on the proposed material for establishment of the stabilized storage area.

Response: It is currently the intent to utilize a crushed granite or washed limerock over a filter fabric. The construction plans will provide the details. It is understood that asphalt milling will NOT be allowed.

10) The proposed Site Plan presents a calculation of 72% open space. Please note that open space includes vegetated areas, or urban areas unencumbered by an impervious surface. Please advise further on this presented percentage of the site devoted to open space.

Response: the open space areas and calculations have been revised to show the location of the 20% vegetated, or urban unencumbered areas. The stabilized storage, although pervious in nature, has been removed from the calculated Open Space area.

11) The presented Site Plan notes a maximum building height of 38 ft., however the elevation sheet provided suggests that the cement storage bin will have a peak height of roughly 46 ft.

Response: The Site plans, and narrative has been changed to reflect the height of the cement storage bins

12) *Pursuant to City Code Section 22-187 (7) interior vehicular use areas.* The following are standards relating to landscaping of interior vehicular use areas:

a. Lots with vehicular use areas that are four thousand (4,000) or more square feet in size shall have at least one square foot of interior landscaping for each fifteen (15) square feet of vehicular use area, except that areas in an I-1 or I-2 zone shall only be required to have at least one square foot of interior landscaping for each thirty (30) square feet of vehicular use area. Each separate landscaped area shall be curbed and contain a minimum of one hundred (100) square feet of area and shall be at least ten (10) feet wide and ten (10) feet deep exclusive of curbing in all locations. Progressive urban parking area designs may be used to provide adequate space for multiple tree plantings and allow for proper tree root development so shade trees can grow and develop large canopies to reduce parking lot heat islands.

Response: Please see revised landscape plan. The plan provides for 597 square feet which is in excess of the required 516 square feet.

b. Interior landscaping shall include an average of at least one tree for each one hundred (100) square feet of required landscaped area. The remainder of the required landscaped area shall be landscaped with grass, ground cover or other landscaped treatment. Such landscaped areas shall be located in such a manner as to divide and break up the expanse of paving and at strategic points to guide traffic flow and direction.

Response: Please see revised landscape plan for all required trees and landscaped areas which will conform to this requirement.

c. The submitted Landscape plan affirms the requirements for 3,159 sq. ft. of interior vehicular use landscape area, however the plan does not reflect the implementation of such areas. Furthermore, the presented site plan presents a required interior landscape area of 516 sq. ft., which is based upon the site retaining a I-1 zoning district. Please provide clarification, and justification of the utilized figures within the PD narrative.

Response: The vehicular use area has been corrected to 15,466 square feet. The required landscape area is 516 square feet and the revised landscape plan

provides for 597 square feet. Please see the revised Landscape Plan. This has also been incorporated into the PD Booklet.

Structure Design Comments:

1) City of Fort Pierce Code Section 22-59(g) presents the required *Design review guideline for the subject development, please advise on the presented design which regards to each of the noted components, or update the site design with regards to the following:*

(1) Roofs

c. The use of deep (32"—40") overhangs and, where appropriate, detailed eave brackets, are strongly encouraged. Variation in roof heights or articulation of a flat roof overhang along the facade is encouraged to add visual interest to a streetscape and delineation of activity within a structure.

Response: A 3'-6" roof overhang is utilized along the office building providing shade to the façade as well as protected cover from rain at the entrances and exits. The use of non-structural decorative columns help add a welcoming feel to the structure.

(2) Entrances

a. Buildings shall have architectural features such as porches or roof overhangs that delineate or emphasize entrances. Covered entrances shall be proportioned to human scale and follow logic of design relative to the building. This entrance shall face the public right-of-way, be well-defined architecturally and readily visible to pedestrian and vehicular traffic.

b. To provide for consistent spatial order of streets, and to accommodate a human scale and pedestrian activity, the inside line of the front yard (setback) shall be considered a frontage line. Exceptions to this requirement may be granted for development in the following zoning districts: OS-1 (Open Space Recreation), OS-2 (Open Space Conservation), I-1 (Light Industrial), CP-1 (Commercial Parkway), C-6 (Marine Commercial), and C-3 (General Commercial) on properties backing onto a highway and fronting an internal access road.

Response: The entrances to the buildings are located on the north and south sides, off of an interior courtyard between the two buildings. A sidewalk leads the pedestrian towards the entrance. They are covered with a 3'6" overhang to protect from sun and rain.

(3) Windows.

d. Windows must be placed on elevations that face the public right-of-way and must be in scale and compatible with the architectural style of the building.

e. Large expanses of wall without windows or detail that face the public right-of-way are prohibited.

Response: Windows are placed on the office building facing the right of way and match the scale of the building. Decorative metal grilles and stucco work on the plant building match the scale of the office building and tie the two buildings together. Using control joints as a means to add rhythm and repetition to the façade help create a human sense of scale and give the buildings a more commercial feel.

(4) Elevations

b. Elevations adjacent to a public right-of-way shall be considered as a building front and treated as such with appropriate entrances, fenestration or detailing.

Response: The elevations of both buildings are highly detailed with stucco and metal siding. Decorative grilles and columns help add a sense of human scale. A centered louver creates balanced symmetrical facades. Welcoming pineapple sculpstone medallions are placed at the entrance walk columns. A 7' high masonry wall helps hide any industrial work being done from the street view and links the two buildings together, while providing an obvious entrance path.

(7) Landscaping

a. All landscape designs and drawings shall conform to chapter 22, article XII of this Code.

b. Landscaping for the proposed development shall provide visually harmonious and compatible settings for structures on the same lot as well as adjoining or nearby lots and shall blend with the surrounding landscape. The scale of the proposed landscaping shall be in proportion to the building and to the human scale of the streetscape.

Response: All landscape shall conform to Chapter 22, Article XII of the City Code. Proposed landscaping will provide the visual harmony and compatibility needed in this area. The buildings will be landscaped in a cohesive design in proportion to the structures and site, and provide human scale to the architecture.

Traffic Impact Review:

1) The traffic study suggests that US Highway 1, within the study area, contains a continuous common turn lane. FDOT has established multiple medians and defined turn lanes assigned for use by specified travel directions.

Response: The Traffic Impact Report has been adjusted to clearly define the nature of the existing roadway network

2) Please provide clarification as to the incorporation of the administrative staff into the presented trip generation data.

Response: The administrative staff was included within the early shift. The report has been adjusted to separate the administrative staff from the shift staff

3) Please provide guidance as to the potential impacts of the proposed railway trips/deliveries upon the surrounding roadway networks and railroad crossings (Orange Avenue).

Response: The proposed project will indeed deliver crossties via rail service. The rail spur will be incorporated into the existing Walmart spur. It is anticipated that there will be a maximum of one inbound and one outbound shipment per day consisting of no more than 10 railcars average for the specific use of the project. The distance required for the 10 railcars will be accommodated within the 550' spur track to be constructed for the project. The distance from the project to Orange Avenue is over 1,200 feet. Specific project related shipments should not impact Orange Avenue; however the actual length of the train will be determined by FEC on a case by case basis and is not under the control of the developer. The shipments will happen during the day at off peak hour vehicular traffic which should result in minimal impacts to the community.

4) Please provide turn data for the 3rd Street/Georgia Avenue & Georgia Avenue/US Highway 1 intersections accounting for current conditions, in order to ensure safe navigation within established travel lanes.

Response: The existing intersection geometry requires existing northbound right turn movements for certain types of truck to occupy part of the shared westbound through/left turn lane. Current deficiencies in existing right-of-way and the location of existing above ground utility facilities prohibit changes to the turning radius.

It is estimated that the additional truck traffic that will be utilizing the north bound right turn lane will be under 10 trips per day all during off peak hours, which is a minimal increase in impact at the intersection.

It is our understanding that Grant funds may be available from Enterprise Florida that could assist the City and FDOT in correcting the existing deficiency.

5) Table 8 indicates that the PM Peak Post-Development Conditions for US Highway 1, north of Georgia Avenue, will improve to an LOS of B. Please provide further clarification of this scenario.

Response: The LOS for Georgia Ave. will be C in the post condition. The reference in the table is a typographical error and has been corrected.

We trust that this re-submittal address all of staff comments and allows the project to be placed on the June 9, 2015 Planning & Zoning Board meeting agenda. As always, should you have any questions, please do not hesitate to contact me at (772)464-3537 or via the Email address referenced above.

Sincerely,

CULPEPPER & TERPENING, INC.

Stefan K. Matthes, P.E.
Senior Vice President

Enclosures: as listed

Cc: Rusty Croley, Rocla
Mike Jacquin
Paul Drittenbas

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS

C&T Project No.:14-189
File: CFtP Eng
Sender's Email: smatthes@ct-eng.com

May 29, 2015

VIA: ***Hand Delivery***

Ms. Peggy Arraiz, Code Compliance Officer
City of Fort Pierce Community Response Divisions
100 North US Highway 1
Ft. Pierce, FL 34950

RE: Rocla Crosstie Facility
TRC Project No. 15-42000001
Response to Comments

Dear Ms. Arraiz:

We are in receipt of your comment letter dated May 11, 2015. We have reviewed the comments, along with the comments received by other members of the TRC and respectfully re-submit the following materials for review in advance of the May 21, 2015 TRC meeting:

- Copy of the FDEP Air Quality Permit Application
- Rocla Crosstie Facility – Dust Mitigation Protocol

Our itemized responses to your comments are as follows:

1. There are no current code violations or outstanding balances at this location.
   Response: Thank You.

2. Code is very concerned about the dust that is created by such a facility. We have had past code enforcement issues with the Cemex facility, which is adjacent to this proposed development. Specifically when cleaning the silos, which is occasionally necessary, it creates a large amount of dust that cannot be completely contained. It related a health hazard to the employees of neighboring businesses and caused damage to buildings and vehicles. We had to involve the DEP in this matter due to the air pollution problem. I have very serious concerns that allowing such a heavy industrial use so close to US 1, Citrus Ave and the downtown area will endanger the comfort, repose, health and safety of the residents in violation of Sec. 16-46 of the City Code of Ordinances.
   Response: The proposed project will be using state of the art equipment which will result in minimal amounts of dust. The cement is blown directly into the bins using a sealed system. The bins are self cleaning after every use which includes the filters. No cement dust will leave the bins as it is constantly reused. A copy of the project Dust Mitigation Protocol is provided for your files.

   Additionally, the project has received the FDEP Air quality permit. We are currently awaiting confirmation from FDEP

3. Nuisance as a condition means a certain state of being or situation located on property which:
   (1) Injures or endangers the comfort, repose, health or safety of any person; or
   (5) Renders other persons insecure in life or the use of property; or
   (6) Interferes with the comfortable and quiet enjoyment of life or property; or
   (7) Tends to or could depreciate the value of property of any persons; or
   (11) Any noises or vibrations, including animal noises, which disturb the peace of the surrounding area or are otherwise unlawful; or
   (12) Any foul, offensive or unlawful emissions, odors or stenches and the causes thereof; or
   (14) Dense smoke, noxious or lethal fumes, lethal gas, soot or cinders; or

   Response: The design of this facility takes into account all aspects to insure that nuisance conditions both on site and for neighboring properties will not occur.

We trust that this re-submittal addresses your concerns and will allow the Site plan to gain conditional approval. As always, should you have any questions, please do not hesitate to contact me at (772)464-3537 or via the Email address referenced above.

Sincerely,

CULPEPPER & TERPENING, INC.

Stefan K. Matthes, P.E.
Senior Vice President

Enclosures: as listed

Cc: Kori Benton, CFP Planning
Rusty Croley, Rocla
Mike Jacquin
Paul Drittenbas

Dust Mitigation Protocol

Rocla Crosstie Facility

The following provides the cement use procedures and dust mitigation methods utilized by Rocla Concrete Tie, Inc. in the production of prestressed concrete railroad ties. The technology for the collection and use of cement and other pozzolan materials has vastly improved since the time that Rinker installed and operated their facility and cement bins in Fort Pierce. Rocla always procures the top of the line dust mitigation accessories and products for their batch plant and bins, and over the years has developed additional methods to reduce the amount of dust produced by our operations.

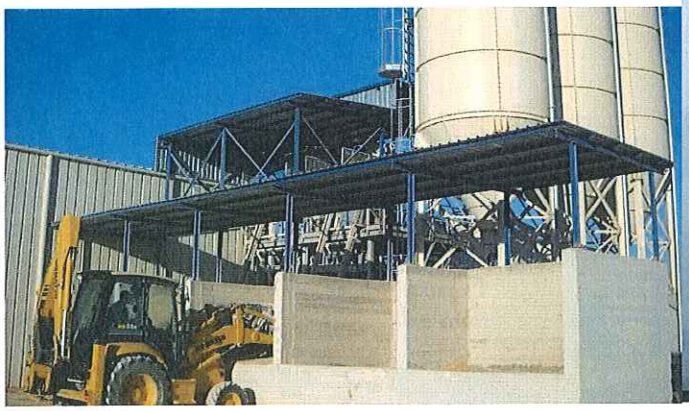
The bins used in our operations are a completely sealed system and are never exposed to the open air for any reason. When cement arrives to our facility, it is blown directly into the bins via a sealed pipe or hose. At the top of the bin sits a Belgrade Steel Tank Co. "belle" style dust house, containing polyester filters, which collect any excess dust with a 99.99% efficiency (cut sheets attached). These filters are then vibrated after each load of material has been blown in, which causes all of the collected excess dust to fall into the bin and effectively cleans the dust house to be ready for the next delivered load of material. Cement is delivered from the bin into a weigh hopper above the mixer via a closed-pipe screw conveyor. Emissions from the weigh hopper are controlled by a dustproof transition piece and venting hose that vents emissions directly back into the mixer.

Sand and Rock are delivered to the plant via dump trucks and offloaded directly into a walled, aggregates storage area. These stockpiles will be enclosed on three sides by concrete walls to control wind erosion. In addition to the concrete enclosure the stockpiles are watered twice daily to maintain moisture content, promote evaporative cooling, and further minimize wind erosion. The sand and rock are then delivered to covered storage bins via a front-end loader. These bins have hydraulic lids that only open to deposit the aggregates and will remain closed at all other times, further mitigating wind erosion. The aggregates are batched into aggregate weigh hoppers inside the batch plant building enclosure. The sand, rock, cement, flyash and water are deposited into the concrete mixer for mixing. Emissions at the mixer are controlled by polypropylene cartridges in the mixer dust filters. After mixing, the concrete is deposited directly into the casting mold, which takes place within the enclosure of the batching plant.

The finished product will be placed in a storage yard, the surface of which will be a compacted, washed aggregate. The rock we will use will be one that produces little to no dust, even with vehicular traffic and movement in this area. Additionally, this storage yard will be watered intermittently to mitigate any small amount of dust that may be produced from operating in this area. Attached to this letter you will find cut sheets for some of the aforementioned equipment as well as pictures from a facility in Italy that uses the same equipment with identical operational procedures as Rocla will be using in Fort Pierce. As you can see from the cut sheets, the efficiency for this equipment is 99.99% and from the pictures, this is a very clean operation with no apparent dust issues.


MIXON















FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
BOB MARTINEZ CENTER
2600 BLAIRSTONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR
CARLOS LOPEZ-CANTERA
LT. GOVERNOR
JONATHAN P. STEVERSON
SECRETARY

Electronic Submission

Air General Permit Registration

You have successfully submitted an Air General Permit Registration to operate a **Concrete Batching Plant** Facility under the authority of **Rule 62-210.310, F.A.C.**. Your registration was received on **February 23, 2015**. Unless you are notified by the Department of ineligibility to use the air general permit, you may use the air general permit thirty (30) days after giving notice to the Department.

Below is a copy of the details of your registration for your records.

Facility Information

Facility ID:	1110145
Facility or Business Name:	Rocla Concrete Tie, Inc.
Site Name:	Rocla Concrete Tie, Inc., Fort Pierce
Address Line 1:	600 S 3rd St
Address Line 2:	(estimated)
City/State/Zip Code:	Fort Pierce, FL 34950 1525

Mailing Address

Address Line 1:	1819 Denver West Dr
Address Line 2:	Ste 450
City/State/Zip Code:	Golden, CO 80401 3198

Owner

Name:	Rocla Concrete Tie, Inc.
Address Line 1:	1819 Denver West Dr
Address Line 2:	Ste 450
City/State/Zip Code:	Golden, CO 80401 3198

Facility Contact(s)

Name:	Casey Whitfield

Address Line 1:	600 S 3rd St
Address Line 2:	(estimated)
City/State/Zip Code:	Fort Pierce, FL 34950 1525
Phone Number:	(806) 316-7888
Extension:	
Cell Number:	
Fax Number:	
E-mail Address:	casey_whitfield@roclatie.com

Correspondence Contact(s)

Name:	Dana Head
Address Line 1:	1819 Denver West Dr
Address Line 2:	Ste 450
City/State/Zip Code:	Golden, CO 80401 3198
Phone Number:	(720) 936-4311
Extension:	
Cell Number:	
Fax Number:	
E-mail Address:	dhead@roclatie.com

Notification Submitted By

Name:	Dana Head
Phone Number:	(720) 936-4311
E-mail Address:	dmahead@gmail.com

All information submitted was certified true, accurate, and correct to the best of the knowledge of the person whose name appears above.

If you have any questions or concerns about the information contained in this report, please contact the Small Business Environmental Assistance Program at (800) 722-7457 or by e-mail at FL.AGP@dep.state.fl.us.

Facility Information[1]

Estimated Start-up Date: 10/30/2015

Type of Facility:

X	Stationary Facility
	Relocatable Facility

Co-Location:

The facility is not co-located with another concrete batch plant, nonmetallic mineral processing plant that is operating under a different air general permit.

Concrete Batcher Details:

Process Equipment Type	Equipment Identification	Control Device	Control Device Manufacturer	Control Device Model #
Silo	Silo 1	Baghouse	WAM Group	Series R03
Silo	Silo 2	Baghouse	WAM Group	Series R03
Weigh Hopper	Cement Hopper	Vent Filter	WAM Group	Generic

Facility Description:

File Description
Florida Air Permit

Precautions (Management of roads/parking areas, stock piles, and yards):

	Pave Roads
X	Maintain Roads/Parking/Yards
X	Remove Particulate Matter
X	Pave Parking Areas
X	Use Water Application
X	Reduce Stock Pile Height
	Pave Yards
	Use Dust Suppressant
X	Install Wind Breaks

Precautions (Drop points to trucks):

	Spray Yard
	Chute
	Partial Enclosure
X	Enclosure

[1]Items appearing in RED indicate a value or response that may cause your Air General Permit to be out of compliance.

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS

C&T Project No.:14-189
File: CFtP Eng
Sender's Email: smatthes@ct-eng.com

May 29, 2015

VIA: ***Hand Delivery***

Mr. John Andrews, PE, City Engineer
City of Ft. Pierce Engineering Dept.
100 North US Highway 1
Ft. Pierce, FL 34950

RE: Rocla Crosstie Facility
TRC Project No. 15-42000001
Response to Comments

Dear Mr. Andrews:

We are in receipt of your comment letter dated April 14, 2015. We have reviewed the comments, along with the comments received by other members of the TRC and respectfully re-submit the following materials for your consideration:

- Gopher Tortoise Relocation Permit ;

Our itemized responses are as follows:

1. Being as South 3rd Street has a substandard right-of-way width of 40', the applicant has depicted the required 10' right-of-way easement across the limits of his property along South 3rd Street. A sketch and description of this easement along with a recent owners and encumbrances search will be required prior to issuance of a Site Work Permit. Specific information may be obtained from the Planning and Zoning Department.

Response: So noted. A sketch and description will be provided concurrent with the submittal of the Construction Plans documents.

2. At time of Building Permit submittal, please identify the material that will be utilized for the stabilized area. Please be aware that asphalt millings will not be permitted.

Response: It is currently the intent to utilize a crushed granite or washed limerock over a filter fabric. The construction plans will provide the details. It is understood that asphalt milling will NOT be allowed.

3. The environmental report indicates that one active gopher tortoise burrow was located on site. Prior to any land clearing operations, the applicant shall forward a copy of the FFWCC Relocation Permit.

Response: We have obtained the required relocation permit from the Florida Fish and Wildlife Conservation Commission and are in the process of relocating the gopher tortoise.

We trust that this re-submittal meet with your approval and will allow the Site plan to be heard at the June 9, 2015 Planning & Zoning Board Meeting. As always, should you have any questions, please do not hesitate to contact me at (772)464-3537 or via the Email address referenced above.

Sincerely,

CULPEPPER & TERPENING, INC.

Stefan K. Matthes, P.E.
Senior Vice President

Enclosures: as listed

Cc: Kori Benton, CFP Planning
Rusty Croley, Rocla
Mike Jacquin
Paul Drittenbas

Gopher Tortoise 10 or Fewer Burrows

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
Division of Habitat and Species Conservation
Species Conservation Planning Section
620 South Meridian Street, Mail Station 2A
Tallahassee, Florida 32399-1600
(850) 921-1031

Permittee Name:	Rocla Concrete Tie, Inc.	Permit Number: GTT-15-00172
Permittee Address:	1819 Denver W. Drive, Suite 450 LAKEWOOD, COLORADO 80401 UNITED STATES	Effective Date: May 22, 2015 Expiration Date: May 22, 2016
Agent Name:	Robert Weigt	
Agent Address:	Hobe Sound Environmental Consultants, Inc. 9512 SE Duncan Street HOBE SOUND, FLORIDA 33455 UNITED STATES	

IS AUTHORIZED TO:

Capture by bucket trap, hand shovel, and backhoe excavation, remove and relocate all gopher tortoise (*Gopherus polyphemus*) hatchlings less than or equal to 60 mm carapace length (CL), and up to 5 gopher tortoises greater than 60 mm CL by non-harmful means, and to molest, damage or destroy gopher tortoise burrows while conducting these activities, subject to the following conditions and provisions, in association with development activities within the following site that contains 10 or fewer gopher tortoise burrows.

AUTHORIZED LOCATION(S): 7.54-acre Rocla Concrete Tie industrial site located at South 3rd Street (T35S,R40E,S10; with Latitude 27° 26' 30.29"N and Longitude 80° 19' 25.46"W), in St. Lucie County, relocated and released at the 566.17-acre Triple S Land Company Phase II recipient site (T32S,R35E,S22,27&34; with Latitude 27° 39' 43.91"N and Longitude 80° 49' 11.64"W), in Indian River County, that is authorized to receive gopher tortoises under permit number GTSR-09-00009E.

Permittee Signature: _____ Date: 5/22/15

Not valid unless signed. By signature, confirms that all information provided to issue the permit is accurate and complete, and indicates acceptance and understanding of the provisions and conditions listed below. **Any false statements or misrepresentations when applying for this permit may result in felony charges and will result in revocation of this permit.**

Authorized By: Richard McCann Authorized for: Nick Wiley, Executive Director

Authorizing Signature: _____ Date: 05/22/2015

Species Conservation Planning Section

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS

C&T Project No.:14-189
File: FPUA
Sender's Email: smatthes@ct-eng.com

May 18, 2015
VIA: ***Hand Delivery***

Ms. Valerie Schulte, PE
Ft. Pierce Utilities Authority
206 South 6th Street
Ft. Pierce, FL 34950

RE: Rocla Crosstie Facility
City of Fort Pierce TRC Project No. 15-42000001
Response to Comments

Dear Ms. Schulte:

We are in receipt of your comments dated April 23, 2015. We have reviewed the comments, along with the comments received by other members of the TRC and respectfully re-submit the following materials for review in advance of the May 21, 2015 TRC meeting:

1. FPUA Plan Review Application form
2. Two (2) copies of the revised Site Plan;

Pursuant to our Pre-application meeting held on May 1, 2015, please find our itemized responses to your comments as follows:

1. Please submit a plan review application and Utility plans to FPUA. Site plan does not indicate water and sewer connections to the proposed development. What is your fire flow requirement to the site? An additional water main loop may be required if you have a large fire flow requirement.

Response: Please find the Plan Review Application attached. As discussed, we will not be providing fire protection within the manufacturing building. The hydrant flow test provided by FPUA on May 4, 2105 provides more than sufficient flow for the project. We have added the proposed connections for the potable water, temporary water, sanitary and irrigation services to your existing system as discussed.

As always, should you have any questions, please do not hesitate to contact me at (772)464-3537 or via the Email address referenced above.

Sincerely,
CULPEPPER & TERPENING, INC.

Stefan K. Matthes, P.E.
Senior Vice President

Enclosures: as listed
Cc: Kori Benton, CFP Planning
Rusty Croley, Rocla
Mike Jacquin
Paul Drittenbas

Fort Pierce Utilities Authority
"Committed to Quality"
1701 South 37th Street (34947)
Post Office Box 3191
Fort Pierce, Florida 34948-3191
Phn: (772) 466-1600
Fax: (E) (772) 461-1938, (F) (772) 465-0268, (G) (772) 468-2413, (W/WW) (772) 468-2414

Submit

Print Form

Plan Review Application

Date: May 15, 2015

Products & Services Available* - Check All that Apply for Additional Information

Communication Services	Electric Services	Natural Gas Services	Water	Wastewater
☐ Fiber	☒ Electric	☒ Gas	☐ Fire Protection	☒ Private Lift Station
	☒ Outdoor Lighting		☒ Irrigation	☐ Private Wastewater
			☐ Private Water	☐ Public Wastewater
			☒ Public Water	

*Products and Services may not be available in all areas.

Project Name: Rocla Crosstie Facility

☐ Existing Structure ☒ Proposed Structure

Project Location: North 3rd Street, Fort Pierce

Location Limits: ☒ City ☐ County ☐ Other Explain:

Type of Development: ☐ Commercial Subdivision ☐ Mixed Use Development ☐ Shopping Center ☐ Hotel/Motel ☐ Office Park ☐ Warehouse

☐ Apts/Condos/Townhouses ☐ Residential Subdivision ☒ Other Explain: Manufacturing Facility

Parcel Control Number(s): i.e. 2427-603-0010-000/1 2410-805-0005-000-1 | 2410-811-0001-030-1

Engineering Firm ☐ Check if submitting revised information.

Company: Culpepper & Terpening, Inc. **Phone No.:** +1 (772) 464-3537
Project Engineer: Stefan K. Matthes, PE **Cell No.:** +1 (772) 766-1363
Address: 2980 South 25th Street **Fax No.:** +1 (772) 464-9497
City: Fort Pierce **State:** FL **Zip:** 34981 **E-mail Address:** smatthes@ct-eng.com

Developer ☐ Check if submitting revised information.

Company: Rocla Concrete Tie, Inc. **Phone No.:** +1 (303) 296-3500
Contact: Rusty Croley **Cell No.:** +1 (720) 256-2617
Address: 1819 Denver West Drive, Suite 450 **Fax No.:**
City: Denver **State:** CO **Zip:** 80401 **E-mail Address:** rcroley@roclatie.com

Owner ☐ Check if submitting revised information.

Company: Florida East Coast Railway LLC **Phone No.:** NA
Contact: Francis Chinnici **Cell No.:** NA
Address: 7411 Fullerton Street, Suite 300 **Fax No.:** NA
City: Jacksonville **State:** FL **Zip:** 32256 **E-mail Address:** NA

FPUA Use Only

Agreements Required: ☐ Annexation ☐ Supply ☐ Easement ☐ Industrial Pretreatment Permit

Type of Service Requested:

Communications

How many computers would you estimate will use the internet at this location? 2

Is this business's use of the Internet low, medium or high?

Do you plan to host your own website or email at this location?

If yes, how many servers will serve on the Internet?

Although FPUA does not provide phone service, our Dedicated Internet Access (DIA) service is ideally suited to support Internet phone service (VoIP). Might you use DIA voice service?

If yes, how many VoIP phone lines would you estimate at this location?

May you need fiber optic network connections to other locations in the Research Treasure Coast?

Normal service delivery is site dependent and runs about 2 - 20 weeks after ordered. When do you estimate service will be needed?

Electric

Voltage ☐ Single Phase ☐ Three Phase ☐ 120/240 ☐ 120/208 ☒ 240/480 ☐ 277/480

Service Size: 800 Amps Connected Load: Amps Days of Operation:

Anticipated Demand: KW Hours of Operation: Number of Meters:

Natural Gas

Anticipated Load: 1500 BTU/CFH Number of Meters: 1 Hours of Operation: 16 Days of Operation: 6

Water

Indicate Quantity of Meters in the Applicable Box Below Each Meter Size

	5/8" x 3/4"	1"	1 1/2"	2"	3"	4"	6"	
No. of Existing Meters:								Type:
No. of New Meters:								Type:

Note: Regardless of ERCs determined for flow calculations, each meter installed with this project shall receive a minimum of 1 ERC.

Wastewater

Gravity: Lateral Size: **Force Main:** Pipe Size: 2

Water and Wastewater

Flow Derivation

Complete all applicable information below for you project.

Applicable Units: NA Number of Beds: NA

Square Feet: 2,625 Number of Seats: NA Including bar and outside seating.

Employees - Total No.: 36 Per Shift: 24 Shifts Per Day: 2

Other:

Complete 1 of the Following 3 Options - Select Only One Option

☒ A. Historical ERC Data based on same or similar existing facility:

Calculated ERCs: (attach all historical data)

☐ B. ERC Determination Table: See Our Current CIC Resolution - Table 1 for ERC determination method help.

Type of Establishment: Per Table 1 Calculated ERCs:

☐ C. Estimated by FPUA

If unable to provide any of the above options, the applicant can defer to FPUA to estimate water usage (FPUA Engineer to attach calculations).

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS

C&T Project No.:14-189
File: SLC PW
Sender's Email: smatthes@ct-eng.com

May 18, 2015
VIA: ***Hand Delivery***

Mr. Ron Harris, PSM, County Surveyor
St. Lucie County Public Works Dept.
2300 Virginia Ave.
Fort Pierce, FL 34982

RE: Rocla Crosstie Facility
City of Fort Pierce TRC Project No. 15-42000001
Response to Comments

Dear Mr. Harris:

We are in receipt of your comments dated April 9, 2015. We have reviewed the comments, along with the comments received by other members of the TRC and respectfully re-submit the following materials for review in advance of the May 21, 2015 TRC meeting:

- Two (2) copies of the revised Site Plan;

Our itemized responses are as follows:

1. South 3rd Street is subject to the jurisdiction of the City of Ft. Pierce.
Response: So noted.

2. It is noted that the City of Ft. Pierce may require the applicant to construct a concrete sidewalk along South 3rd Street.
Response: A 10' R/W easement will be provided to the City for the installation of a sidewalk once warranted.

3. The applicant is advised that the City may require an additional right of way easement for South 3rd Street.
Response: So noted, the R/W easement will be provided to the City with the construction plan submittal.

4. It is noted that the site plan did not indicate finish floor elevations for the proposed vertical structures.
Response: The proposed Minimum FFE of 20.50 NAVD has been added to each building.

5. The current property configuration does not match the property appraiser map. Was a legal lot split approved by the City?
Response: The developer, Rocla Concrete Tie, Inc. is entering into a temporary lease agreement with FEC for the project. A lot split will not be required as FEC will retain ownership of the property.

6. The applicant is advised that the St. Lucie County Fire District requires a separate development review application and fee. Contact Captain Derek Fox.

Response: So noted. The application was submitted to The Fire Department on April 3, 2015.

7. What is the height of the cement storage bins?

Response: The maximum height of the tallest cement storage bin is 45' – 7". The architectural elevation has been adjusted to show the height.

As always, should you have any questions, please do not hesitate to contact me at (772)464-3537 or via the Email address referenced above.

Sincerely,

CULPEPPER & TERPENING, INC.

Stefan K. Matthes, P.E.
Senior Vice President

Enclosures: as listed

Cc: Kori Benton, CFP Planning
Rusty Croley, Rocla
Mike Jacquin
Paul Drittenbas

Sec. 11-52.18. - Sound level limitations.

No person shall cause, suffer, allow, or permit the operation of any sound source in such a manner as to create a sound level that exceeds the sound level limits set forth in Table 1 when measured from the real property line of the nearest receiving property, using the slow response setting unless otherwise noted. Such a sound source would constitute a noise disturbance.

TABLE I

SOUND LEVEL LIMITS BY **RECEIVING PROPERTY**

Receiving property category	**Time**	**Sound level limit (dBA)**	**Sound level limit (dBC)**	**Sound level limit (dBZ)**
Residential	**Monday through Saturday 7:00 a.m.—11:00 p.m.**	**60**	**60**	**60**
Residential	**Sunday 7:00 a.m.—1:00 p.m.**	**see sub (1) below**	**see sub (1) below**	**see sub (1) below**
Residential	**Sunday through Saturday 11:00 p.m.—7:00 a.m.**	**see sub (1) below**	**see sub (1) below**	**see sub (1) below**
Commercial	**At all times**	**65**	**65**	**65**
Industrial	At all times	70	70	70

(1) It shall be unlawful for any person to make, continue or cause to be made or continued within that portion of the city which has been designated as a residential or mixed use area of the city, between the hours of 11:00 p.m. and 7:00 a.m. of each day, and on Sunday from 7:00 a.m. to 1:00 p.m. any unreasonably loud, excessive, unnecessary, or unusual noise in such manner that noise produced, or the vibration made, by the same would be obvious, or cause discomfort and annoyance to an ordinary, reasonable prudent person at a distance greater than fifty (50) feet from the real property line of the nearest receiving property. A sound level meter or sound level reading shall not be necessary for the enforcement of this paragraph.

(2) If the noise is an impulsive sound, the fast response setting shall be used and the daytime (7:00 a.m.—11:00 p.m.) limits of Table 1 shall be increased by ten (10) dBA, dBC, or dBZ.

(3) In a multi-family dwelling, it shall be unlawful to create or permit to be created any noise that exceeds the daytime (7:00 a.m.—11:00 p.m.) limit of fifty (50) dBA, dBC, or dBZ and the nighttime (11:00 p.m.—7:00 a.m.) limit of forty (40) dBA, dBC, or dBZ. as measured from a neighbor's dwelling.

(4) In a mixed use building, it shall be unlawful to create or permit to be created any noise that exceeds the daytime (7:00 a.m.—11:00 p.m.) limit of fifty-five (55) dBA, dBC, or dBZ and the

nighttime (11:00 p.m.—7:00 a.m.) limit of forty-five (45) dBA, dBC, or dBZ as measured within the residential use portion of the building.

(5) In addition to the limits of Table 1, for any sound source which impacts residential property, the maximum allowable sound level limits for the individual octave bands whose centers are 31.5, 63 and 125 Hertz shall not exceed sixty-five (65) dB.

(Ord. No. 14-033, § 1, 12-1-14)

Sec. 11-52.19. - Exemptions.

(a) The following uses and activities shall be exempt from noise level regulations:

(1) Noise of safety signals, warning devices, and emergency pressure relief valves.

(2) Noise resulting from any authorized emergency vehicles, when responding to an emergency call or acting in time of emergency.

(3) Noise resulting from emergency work.

(4) Noise resulting from the operation of any type of aircraft, not including scale model aircraft.

(5) Noise resulting from the operation of any motor vehicle as specified in F.S. Ch. 316 and Ch. 403.

(6) **Noise resulting from the operation of the following facilities existing and in operation on the effective date of this chapter:**

a. Electricity regulating substations.

b. Electric generation plants.

c. Other electric utilities.

d. Gas pressure control stations.

e. Gas production plants.

f. Natural or manufactured gas storage and distribution points.

g. Other gas utilities.

h. Pipeline pressure control stations.

i. Railroad, rapid rail transit, and street railway **transportation.**

j. Industrial wastewater disposal.

k. Sewage disposal.

l. Sewage pressure control stations.

m. Sewage treatment plants.

n. Sewage sludge drying beds.

o. Water utilities and irrigation.

p. Solid waste disposal.

(7) Air conditioners are exempt from provisions of Table I of this chapter when this equipment is functioning in accord with the manufacturer's specifications and with all manufacturers' standard mufflers and noise-reducing equipment in use and in proper operating condition according to standards promulgated by the American Refrigeration Institute. The same exception shall apply to lawn mowers and agricultural equipment during daylight hours.

(8) Non-amplified crowd noises resulting from the activities such as those planned by student, governmental or community groups.

(9) Construction operations for which building permits have been issued, or construction operations not requiring permits due to ownership of the project by an agency of government; providing all equipment is operated in accord with the manufacturer's specifications and with all standard equipment, manufacturers' mufflers and noise-reducing equipment in use and in proper operating condition.

(10) Noises made by persons having obtained a special events permit to use the streets as provided for in chapter 12 article III of city code.

(11) Noises resulting from any authorized law enforcement and firefighting training activities including, but not limited to, police department shooting range exercises.

(12) Noise resulting from the activities of any permitted use, conditional use or accessory use permitted in districts zoned industrial, light or industrial, heavy.

(13) Noise resulting from the temporary operation of equipment or activities relating to normal maintenance of residential or commercial uses, between the hours of 7:00 a.m. and 10:00 p.m. including, but not limited to, the following activities: lawn mowing, maintenance of trees, hedges and gardens; refuse collection; soil cultivation; and pavement sweeping and cleaning.

(14) Noise resulting from the operation of railways and shipping activities.

(15) Noise resulting from construction activities occurring between 7:00 a.m. and sundown. The exemption shall be effective upon obtaining a building permit and shall pertain to any construction activity directly related to the construction authorized under the permit. A special permit issued pursuant to [section] 11-52.20 herein shall be required for the generation of noise resulting from construction activities between sundown and 7:00 a.m. For any violation of the terms of the special permit, the permit holder(s) shall be jointly and severally liable.

(16) Any other noise resulting from activities of a temporary duration permitted by law and for which a license or permit therefore has been granted by the city manager or his designated appointee.

(b) Where an industrial or commercial use is established on property not adjacent to a residential use district and the adjacent property subsequently becomes residential, the noise resulting from the operation of the preexisting industrial or commercial use which is projected into the residential use district shall be subject to the permissible noise levels for industrial or commercial use districts, as appropriate.

(c) Where the noise levels for a preexisting use are more restrictive than those for a subsequent use established adjacent to the preexisting use, the noise level for the preexisting use shall apply.

(Ord. No. 14-033, § 1, 12-1-14)

Citrus Avenue

S 2nd Street

Dry Retention

FEC Railway

CEMEX Plant (Vacant)

Stabilized Drive

Landscape Buffer

S 3rd Street

Stabilized Storage Area

Access Drive

Office

Manufacturing Facility

Parking

Landscape Buffer

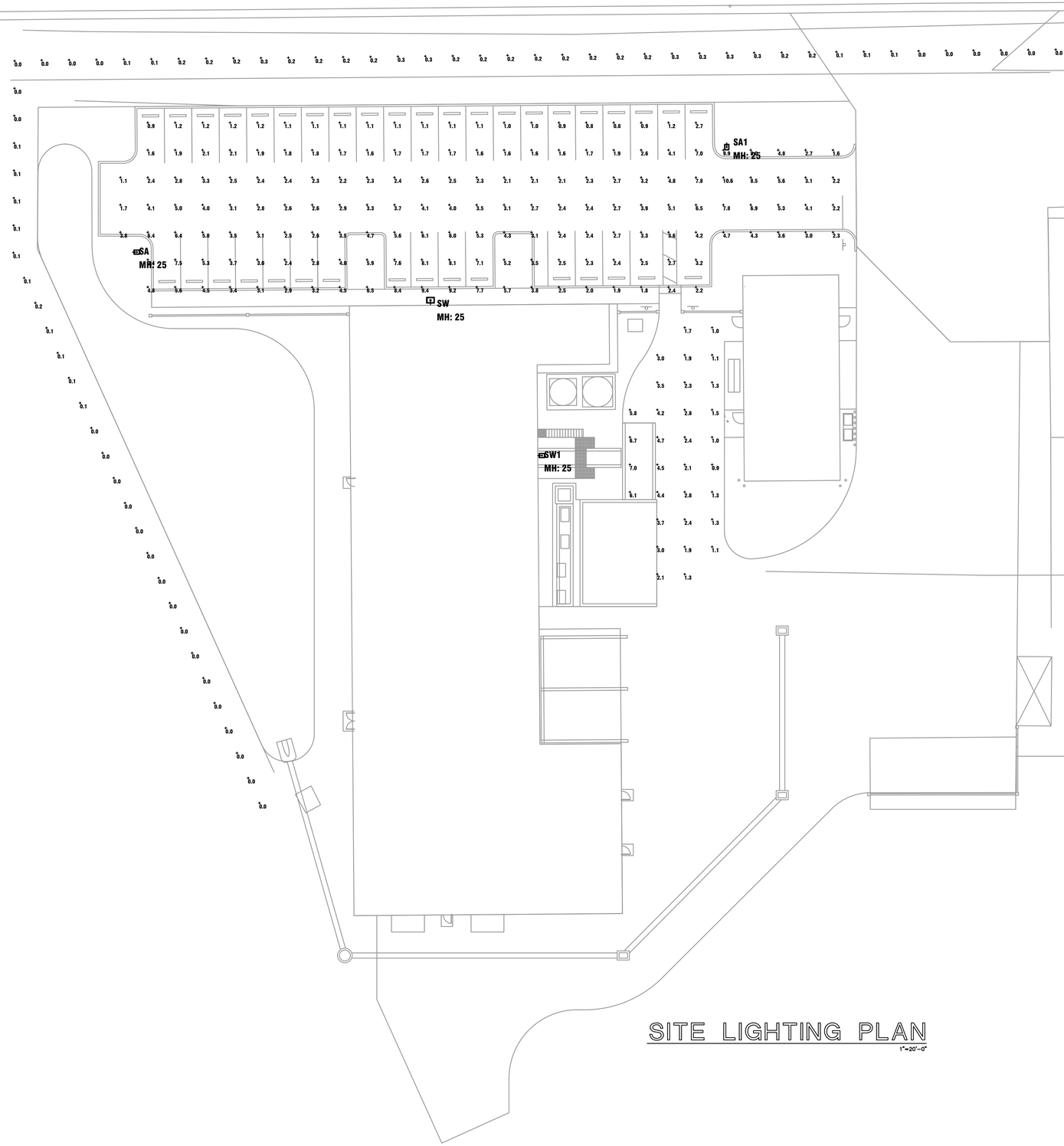
Landscape Buffer

Retention

N

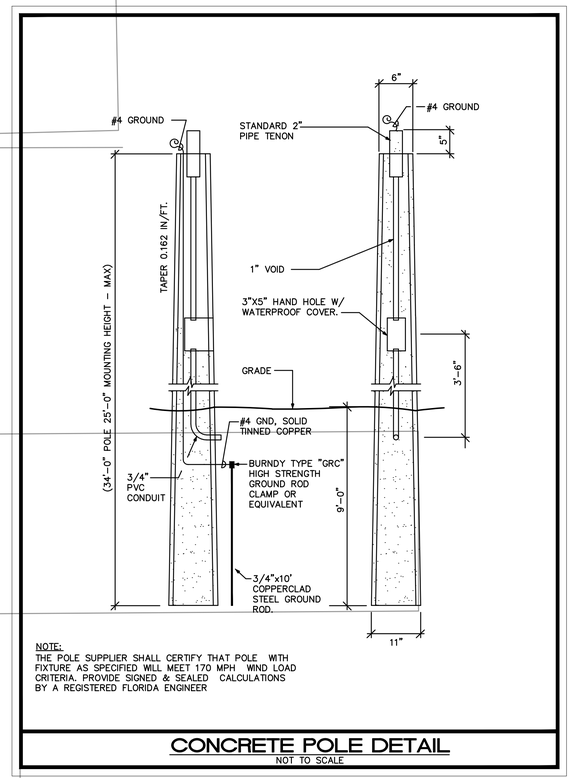
Rocla Crosstie Facility

Site Plan - Layout View



SITE LIGHTING PLAN

1"=20'-0"



NOTE:
THE POLE SUPPLIER SHALL CERTIFY THAT POLE WITH FIXTURE AS SPECIFIED WILL MEET 170 MPH WIND LOAD CRITERIA. PROVIDE SIGNED & SEALED CALCULATIONS BY A REGISTERED FLORIDA ENGINEER

CONCRETE POLE DETAIL

NOT TO SCALE

Luminaire Schedule

Project: ROCLA SITE 5-28-2015

Symbol	Qty	Label	Description	Lumens/Lamp	LLF	Lum. Watts	Total Watts
	1	SA	VISIONAIRE BOW-LX-4-T4-12ELC-7-4K POLE MOUNT: 25' - 0" AFG	N.A.	0.900	276	276
	1	SA1	VISIONAIRE BOW-LX-4-T4-12ELC-10-4K POLE MOUNT: 25' - 0" AFG	N.A.	0.900	437	437
	1	SW	VISIONAIRE BOW-LX-8-T5W-25ELC-10-4K WALL MOUNT: 25' - 0" AFG	N.A.	0.900	864	864
	1	SW1	VISIONAIRE BOW-LX-6-T4-16ELC-10-4K WALL MOUNT: 25' - 0" AFG	N.A.	0.900	814	814

Calculation Summary

Project: ROCLA SITE 5-28-2015

Label	Avg	Max	Min	Avg/Min	Max/Min
LOADING	2.84	7.0	0.9	3.16	7.79
PARKING	3.47	10.5	0.8	4.34	13.25
SPILL	0.11	0.3	0.0	N.A.	N.A.

ISSUED FOR REVIEW

KAMM CONSULTING PROJECT #: 2015-0166
PROJECT MANAGER: DUANE MILLAR

KAMM Consulting
1408 Orange Avenue
Fort Pierce, Florida 34950
Phone 772.595.1744 Fax 772.595.1745
engineering@kammconsulting.com
Certification of Authorization #8189

PRINCIPAL
Bradly L Brown Florida License #58232

5-28-15
date

signed

EDLUND · DRITENBAS · BINKLEY
ARCHITECTS AND ASSOCIATES, P.A.
AR-AA C000886
65 ROYAL PALM POINTE, SUITE "D"
VERO BEACH, FLORIDA 32960
PHONE: (772) 569-4320

SEAL:

PROJECT: ROCLA TIE PLANT

FOR: ROCLA CONCRETE TIE, INC.
600 SOUTH 3RD STREET
FORT PIERCE, FL 34950

NO:	DATE	REVISIONS

MAY '15

COMM. NO: 110214VB
DATE: 28 MAY'15
BY: AD
CH'KD: PD

SHEET NO.

E1.1

Land Use Category	***Residential Density (dwelling units per gross acre)**** *(Also refer density bonus outlined in Policy 1.1.5)**	***Non-Residential Floor Area Ratio (FAR)****	*Land Use Breakdown*
Offices - Professional and Business Services (OP)	10-18 du/ac	1.0	Residential uses may comprise up to 20% of the total floor area of the OP future land use designation.
PUBLIC/INSTITUTIONAL			
Institutional (INST)	N/A	1.0	N/A
INDUSTRIAL			
Boundary Industrial (BI)	N/A	1.5	N/A
Industrial (I)	N/A	1.5	N/A
Heavy Industrial (HI)	N/A	2.0	N/A
CONSERVATION/OPEN SPACE			
Conservation and Open Space (COS)	N/A	0.25	N/A

* - Density bonus provisions are outlined in Policy 1.1.5 of the City's Future Land Use Element.

C. Institutional

Institutional (INST): The Institutional designation provides for public, quasi-public and private institutional uses. Permitted uses within this designation include government buildings; private and public schools; community centers; colleges; public airports; public parking structures; major community facilities, including hospitals, non-profit medical facilities, medical facilities; religious institutions, and government offices. A maximum of 1.0 FAR is permitted.

D. Industrial

Boundary Industrial (BI): The Boundary Industrial designation is intended for parcels suitable for industrial development and to promote the City's position as a major employment center. The uses allowed under this designation include intensive manufacturing and industrial uses, storage and distribution facilities and warehousing. This land use designation allows a maximum FAR of 1.5.

Industrial (I): The Industrial designation is intended for parcels suitable for industrial development and to promote the City's position as a major employment center. The uses allowed under this designation include light manufacturing and processing facilities; storage and distribution facilities; warehousing; general and intensive commercial uses; research corporate parks, large business parks and mixed use office parks; office, retail, and service uses that provide support to employees; and compatible public, quasi-public, and special uses. This land use designation allows a maximum FAR of 1.5.

Heavy Industrial (HI): The Heavy Industrial designation is intended for parcels suitable for industrial development and to promote the City's position as a major employment center. The uses allowed under this designation include intensive manufacturing and processing facilities; storage and distribution facilities; warehousing; general and intensive commercial uses; large business parks; office, retail, and service uses that provide support to employees; and compatible public, quasi-public, and special uses. This land use designation allows a maximum FAR of 2.0.

E. Conservation/Open Space

Conservation and Open Space (COS): The Conservation and Open Space designation is intended to provide for the preservation, continued growth, and enhancement of the City's rich resource of conservation areas, parklands, environmentally sensitive areas, recreational areas and open spaces. The designation provides for natural, managed and cultivated open space, including, natural parks, woodlands, habitat, floodplains, areas with permanent open space easements, greenways, and recreational facilities. This category combines the previously General Open Space (Os), Recreational Open Space (Osr), and Conservation Open Space (Osc) categories. This designation allows a maximum FAR of 0.25.

GOP Map 1-1 - Future Land Use Map (2030)

