

## **CITY PLANNING BOARD**

### **BOARD AGENDA**

Planning Board Regular Meeting - Tuesday, February 13, 2018 - 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. **APPROVAL OF MINUTES**
  - a. Minutes from the January 9, 2018 meeting
  - b. Minutes from the January 23, 2018 Special Planning Board meeting
6. **NEW BUSINESS**
  - a. Conditional Use & Design Review - RG Towers - 2006 Orange Avenue
7. **BOARD COMMENTS**
8. **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**

**5.a.**

Meeting Date: 02/13/2018

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Information

REQUESTED ACTION

Minutes from the January 9, 2018 meeting

LOCATION

RESPONSIBLE STAFF

RECOMMENDATION

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Attachments

Planning Board Minutes 1.9.18

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**Form Review**

Form Started By: Alicia Rosenthal  
Final Approval Date: 02/06/2018

Started On: 02/05/2018 09:57 AM

# DRAFT



## CITY OF FORT PIERCE PLANNING BOARD

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### Planning Board Minutes

OF THE REGULAR MEETING OF THE FORT PIERCE CITY PLANNING BOARD HELD ON TUESDAY, **JANUARY 9, 2018**, 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: **Gloria Johnson-Scott; John George; Bob Burdge; Michael Broderick; Tim O'Connell; Brian Paul; Frank Creyaufmiller, Chairman**

Staff Present: **Iola Mosley, City Attorney**  
**Rebecca Grohall, Planning Director**  
**Kori Benton, Senior Planner**  
**Vennis Gilmore, Planning Analyst**  
**Brandon Creagan, Planner**  
**Alicia Rosenthal, Executive Assistant**

4. **CONSIDERATION OF ABSENCES**

All Planning Board members were in attendance.

5. **APPROVAL OF MINUTES**

- a. Minutes from the December 12, 2017 meeting

**Motion was made by John George, and seconded by Michael Broderick to approve the minutes from the December 12, 2017 meeting.**

**AYE: Michael Broderick, Tim O'Connell, Brian Paul, Gloria Johnson-Scott, John George, Bob Burdge, Chairman Frank Creyaufmiller**

Passed

6. **NEW BUSINESS**

a. **Conditional Use - Sunrise City Spa - 305 S. 7th Street**

Mr. Creagan gave an overview of the application and answered questions from the Board regarding the lighting level and operating under the temporary use application. Mr. Creagan explained that the condition of approval on the staff report has been satisfied.

Angel French, Applicant, provided additional information on the lighting and answered questions from the Board regarding the intention of the upstairs portion of the building.

Charlie Hayek, Property Owner, submitted a survey of the property and stated the lighting has been complied with and the improvements to the property are going to help revitalize the neighborhood.

Michael McLeod, Resident, spoke in support of the application.

**Motion was made by John George, and seconded by Brian Paul to forward a recommendation of approval to the City Commission.**

**AYE: Bob Burdge, Michael Broderick, Tim O'Connell, Brian Paul, Gloria Johnson-Scott, John George, Chairman Frank Creyaufmiller**

Passed

b. **Conditional Use - McLeod Dwelling Rental - 808 Atlantic Avenue**

Mr. Gilmore gave an overview of the application and answered a questions from the Board regarding the property manager proximity and accessibility.

Ms. Grohall explained that the city commission usually requests that the property manager is within a reasonable distance and responds within a reasonable amount of time.

Michael McLeod, Applicant, stated that substantial restoration of the property has been done to almost the original condition. Mr. McLeod said they have chosen to rent out the home because of their desire to try to expand the downtown of Fort Pierce in terms of where people go and there comfort in the downtown area.

Kathy Wassylenko, Co-Applicant, stated they have done intense detailed restoration of the property and they would like other people to appreciate the historic properties in Fort Pierce.

Mr. Burdge disclosed that in the prior year he had discussions with the the applicant concerning the property.

**Motion was made by Michael Broderick, and seconded by John George to forward a recommendation to approve the request with the following conditions:**

**1) The maximum occupancy of the home does not exceed four (4) individuals; two individuals per bedroom, ensuring compliance with City Code Section 8.5-43. - Required space in dwelling units, based upon the size of each unit;**

**2) Registration of the property manager accessible at all times, to resolve complaints or violations of City Code;**

**3) Issuance of guide booklets (available from Code Enforcement) for renters regarding local rules and public service resources to minimize conflicts; and**

**4) The applicant files for and obtains St. Lucie County & City of Fort Pierce Business Tax Licenses within thirty (30) days of Conditional Use approval.**

**5) Limit no more than 2 vehicles (1 in the garage, 1 in the driveway or on-street parking).**

AYE: **John George, Bob Burdge, Michael Broderick, Tim O'Connell, Brian Paul, Gloria Johnson-Scott, Chairman Frank Creyaufmiller**

Passed

**c. Conditional Use - McLeod Dwelling Rental - 820 Atlantic Avenue**

This item was postponed to the January 23, 2018 Special Planning Board meeting.

**d. Conditional Use - Dwelling Rental - 41 Winghaven Lane**

This item was postponed to the January 23, 2018 Special Planning Board meeting.

**e. Conditional Use - Dwelling Rental - 50 Southstar Lane**

This item was postponed to the January 23, 2018 Special Planning Board meeting.

**f. Conditional Use - Dwelling Rental - 401 Southstar Drive**

This item was postponed to the January 23, 2018 Special Planning Board meeting.

**g. Conditional Use - Dwelling Rental Cluster - 2400 S. Ocean Drive:**

- **Golf Lodge 204**
- **Golf Lodge 405**
- **Golf Lodge 500**
- **Golf Lodge 602**
- **Golf Lodge 606**
- **Ocean House 1006**
- **Ocean House 1016**
- **Ocean House 1030**
- **Ocean House 3028**
- **Ocean House 3034**
- **Ocean House 3040**

This item was postponed to the January 23, 2018 Special Planning Board meeting.

**h. Site Plan with Conditional Use - Lawnwood Pavilion Expansion - 1860 N. Lawnwood Circle**

This item was postponed to the January 23, 2018 Special Planning Board meeting.

**i. Abandonment - Segment of Frances (aka Francis) Avenue (Palm Haven Subdivision)**

Mr. Benton gave an overview of the application and answered questions from the Board regarding the status of the land to the west, improvements to the easement, dimensions and market value of the right-of-way.

Chris Sante, Owner and Applicant, stated he wants to revitalize the area by building stilt homes and he wants to continue the sidewalk north to the end of the street.

**Motion was made by Bob Burdge, and seconded by John George to forward a recommendation to the City Commission for approval, with consideration of retaining a 5 ft. pedestrian easement to provide a pedestrian connection, east and west, from the Beach Estates Subdivision and SR A1A & accompanying public beach access points to the east.**

**AYE: Brian Paul, Gloria Johnson-Scott, John George, Bob Burdge, Michael Broderick, Tim O'Connell, Chairman Frank Creyaufmiller**

Passed

## **7. BOARD COMMENTS**

Chairman Creyaufmiller stated there will be a Special Planning Board meeting on January 23, 2017 to hear the items that were not heard on the agenda.

The Board asked if any discussion has taken place regarding notices, within 500 feet, being sent out before the Planning Board meeting. Ms. Grohall explained the City Manager had discussion with the mayor and to date there are no changes to the protocol.

Ms. Grohall stated that this is the last meeting paper copies of the agenda will be produced because the agenda is published online. Ms. Grohall explained that full size plans, from the applicant, will be relayed to the Board members, but the rest of the backup material will be produced electronically.

The Board discussed having hard copies printed for individual Board members. Ms. Grohall said she would look at the potential of providing a Board member, a hard copy, if requested.

## **8. ADJOURNMENT**

**Planning Board**

**5.b.**

Meeting Date: 02/13/2018

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Information

REQUESTED ACTION

Minutes from the January 23, 2018 Special Planning Board meeting

LOCATION

RESPONSIBLE STAFF

RECOMMENDATION

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Attachments

Special Planning Board Meeting Minutes 1.23.18

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**Form Review**

Form Started By: Alicia Rosenthal

Started On: 02/05/2018 10:14 AM

Final Approval Date: 02/06/2018

# DRAFT



## CITY OF FORT PIERCE PLANNING BOARD

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### Planning Board Minutes

OF THE SPECIAL MEETING OF THE FORT PIERCE CITY PLANNING BOARD HELD ON TUESDAY, **JANUARY 23, 2018**, 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: **Brian Paul; Tim O'Connell; Michael Broderick; Bob Burdge; John George; Gloria Johnson-Scott; Frank Creyaufmiller, Chairman**

Staff Present: **James Messer, City Attorney**  
**Rebecca Grohall, Planning Director**  
**Kori Benton, Senior Planner**  
**Vennis Gilmore, Planning Analyst**  
**Alicia Rosenthal, Executive Assistant**

4. **CONSIDERATION OF ABSENCES**

All Planning Board members were in attendance.

5. **NEW BUSINESS**

a. **Conditional Use - McLeod Dwelling Rental - 820 Atlantic Avenue**

Mr. Gilmore gave an overview of the application. Michael McLeod, Applicant, explained to the Board that extensive restoration has been done on the home and renting the home offers visitors the unique opportunity to view the historic area of the city.

**Motion was made by John George, and seconded by Michael Broderick to forward a recommendation to approve the request with the following conditions:**

- 1) The maximum occupancy of the home does not exceed four (4) individuals; two individuals per bedroom, ensuring compliance with City Code Section 8.5-43. - Required space in dwelling units, based upon the size of each unit;**
- 2) Registration of the property manager accessible at all times, to resolve complaints or violations of City Code;**
- 3) Issuance of guide booklets (available from Code Enforcement) for renters regarding local rules and public service resources to minimize conflicts; and**
- 4) The applicant files for and obtains St. Lucie County & City of Fort Pierce Business Tax Licenses within thirty (30) days of Conditional Use approval.**
- 5) Limit no more than 2 vehicles (1 in the garage, 1 in the driveway or on-street parking).**

**AYE: John George, Gloria Johnson-Scott, Brian Paul, Tim O'Connell, Michael Broderick, Bob Burdge, Chairman Frank Creyaufmiller**

Passed

**b. Conditional Use - Dwelling Rental - 41 Winghaven Lane**

Mr. Gilmore gave an overview of the application and explained that the subdivisions constructed after 2002 are not grandfathered in.

**Motion was made by John George, and seconded by Tim O'Connell to forward a recommendation to approve the request with the following conditions:**

- 1) The maximum occupancy of the home does not exceed six (6) individuals; two individuals per bedroom, ensuring compliance with City Code Section 8.5-43. - Required space in dwelling units, based upon the size of each unit;**
- 2) Registration of the property manager accessible at all times, to resolve complaints or violations of City Code;**
- 3) Issuance of guide booklets (available from Code Enforcement) for renters regarding local rules and public service resources to minimize conflicts; and**
- 4) The applicant files for and obtains St. Lucie County & City of Fort Pierce Business Tax Licenses within thirty (30) days of Conditional Use approval.**
- 5) Limit no more than 2 vehicles (1 in the garage, 1 in the driveway).**

**AYE: Brian Paul, Tim O'Connell, Michael Broderick, Bob Burdge, John George, Gloria Johnson-Scott, Chairman Frank Creyaufmiller**

Passed

**c. Conditional Use - Dwelling Rental - 50 Southstar Drive**

Mr. Gilmore gave an overview of the application. No one spoke for or against the application.

**Motion was made by John George, and seconded by Gloria Johnson-Scott to forward a recommendation to approve the request with the following conditions:**

- 1) The maximum occupancy of the home does not exceed six (6) individuals; two individuals per bedroom, ensuring compliance with City Code Section 8.5-43. - Required space in dwelling units, based upon the size of each unit;**
- 2) Registration of the property manager accessible at all times, to resolve complaints or violations of City Code;**
- 3) Issuance of guide booklets (available from Code Enforcement) for renters regarding local rules and public service resources to minimize conflicts; and**
- 4) The applicant files for and obtains St. Lucie County & City of Fort Pierce Business Tax Licenses within thirty (30) days of Conditional Use approval.**
- 5) Limit no more than 2 vehicles (2 in the driveway).**

**AYE: Tim O'Connell, Michael Broderick, Bob Burdge, John George, Gloria Johnson-Scott, Brian Paul, Chairman Frank Creyaufmiller**

Passed

**d. Conditional Use - Dwelling Rental - 401 Southstar Drive**

Mr. Gilmore gave an overview of the application and explained OS-1 zoning.

**Motion was made by John George, and seconded by Tim O'Connell forward a recommendation to approve the request with the following conditions:**

- 1) The maximum occupancy of the home does not exceed six (6) individuals; two individuals per bedroom, ensuring compliance with City Code Section 8.5-43. - Required space in dwelling units, based upon the size of each unit;**
- 2) Registration of the property manager accessible at all times, to resolve complaints or violations of City Code;**
- 3) Issuance of guide booklets (available from Code Enforcement) for renters regarding local rules and public service resources to minimize conflicts; and**
- 4) The applicant files for and obtains St. Lucie County & City of Fort Pierce Business Tax Licenses within thirty (30) days of Conditional Use approval.**
- 5) Limit no more than 2 vehicles (1 in the driveway, 1 in the garage).**

**AYE: Bob Burdge, John George, Gloria Johnson-Scott, Brian Paul, Tim O'Connell, Michael Broderick, Chairman Frank Creyaufmiller**

Passed

**e. Conditional Use - Dwelling Rental Cluster - 2400 S. Ocean Drive:**

- Golf Lodge 204**
- Golf Lodge 405**
- Golf Lodge 500**

- **Golf Lodge 602**
- **Golf Lodge 606**
- **Ocean House 1006**
- **Ocean House 1016**
- **Ocean House 1030**
- **Ocean House 3028**
- **Ocean House 3034**
- **Ocean House 3040**

Mr. Gilmore gave an overview of the application. Mr. Broderick disclosed he owns a unit in the Ocean House and he is moving forward with the conditional use process for renting his unit.

**Motion was made by John George, and seconded by Gloria Johnson-Scott to forward a recommendation to approve the request with the following conditions:**

- 1) The maximum occupancy of the home does not exceed four (4) individuals; two individuals per bedroom, ensuring compliance with City Code Section 8.5-43. - Required space in dwelling units, based upon the size of each unit;**
- 2) Registration of the property manager accessible at all times, to resolve complaints or violations of City Code;**
- 3) Issuance of guide booklets (available from Code Enforcement) for renters regarding local rules and public service resources to minimize conflicts; and**
- 4) The applicant files for and obtains St. Lucie County & City of Fort Pierce Business Tax Licenses within thirty (30) days of Conditional Use approval.**
- 5) Limit no more than 2 vehicles (1 in the assigned parking space, 1 in guest parking).**

**AYE: Michael Broderick, Bob Burdge, John George, Gloria Johnson-Scott, Brian Paul, Tim O'Connell, Chairman Frank Creyaufmiller**

Passed

**f. Site Plan with Conditional Use - Lawnwood Pavilion Expansion - 1860 N. Lawnwood Circle**

Mr. Benton gave an overview of the application and explained the conditions in the staff report have already been met.

Michael Patterson, CEO of Lawnwood Medical Center, made himself available for questions.

The Board complimented Mr. Patterson on the landscape improvements at the hospital and said the expansion is a plus for the city.

**Motion was made by John George, and seconded by Tim O'Connell to forward a recommendation to the City Commission for approval.**

**AYE: John George, Gloria Johnson-Scott, Brian Paul, Tim O'Connell, Michael Broderick, Bob Burdge, Chairman Frank Creyaufmiller**

Passed

**6. BOARD COMMENTS**

**7. ADJOURNMENT**

**Planning Board**

**6.a.**

Meeting Date: 02/13/2018

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Information

REQUESTED ACTION

Conditional Use & Design Review - RG Towers - 2006 Orange Avenue

LOCATION

2006 Orange Avenue

RESPONSIBLE STAFF

Brandon Creagan, LEED Green Associate, Planner

RECOMMENDATION

Recommendation of Approval of a Conditional Use & Design Review Application to Construct a One Hundred & Fifty (150) foot Tall Slim Pole Telecommunication Tower

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Attachments

Planning Staff Report

Application Packet

Site Plan

Survey

Tower Removal Bond

TRC Comments

TRC Comment Response from Applicant

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**Form Review**

Form Started By: Brandon Creagan

Started On: 02/06/2018 11:20 AM

Final Approval Date: 02/06/2018



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**TO:** Members of the City of Fort Pierce Planning Board

**THROUGH:** Rebecca Grohall, AICP, Planning Director

**FROM:** Brandon Creagan, LEED Green Associate, Planner

**SUBJECT:** **Conditional Use (New Construction) & Design Review**  
**RG Towers – Telecommunications Tower**  
**2006 Orange Avenue**

**DATE:** February 6, 2018

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**STAFF REPORT**

**Applicant(s):** RG Towers LLC  
2141 Alternate A1A Suite 440  
Jupiter, FL 33477

**Property Owner:** Lesley Phillips & Abdel Jebbar Elbakkari  
2006 Orange Avenue  
Fort Pierce, FL 34950

**Requested Action:** Recommendation of Approval of a Conditional Use & Design Review Application to Construct a One Hundred & Fifty (150) foot Tall Slim Pole Telecommunication Tower

**Location:** 2006 Orange Avenue

**Parcel IDs:** 2409-605-0008-000-4

**Parcel Size:** 0.45 acres

**Zoning:** C-3, General Commercial

**Future Land Use:** GC, General Commercial

**Surrounding Zoning:**

North	East	South	West
R-3	C-3	C-3	C-3

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**Staff Analysis:**

The applicant RG Towers is seeking a Conditional Use with New Construction & Design Review approval to construct a telecommunications tower at 2006 Orange Avenue. The structure that is proposed is a one hundred and fifty (150) foot slim pole communications tower. The property is zoned C-3, General Commercial with a Future Land-Use of GC, General Commercial. Urban Fashions currently runs its business on the parcel. The communications tower will be located on the vacant part of the parcel.

The applicant will provide a six (6) foot tall wood fence that will shield the site from the right of way and from nearby properties. In addition to the fence, the applicant will also install sixty nine (69) six (6) foot tall Podocarpus that will act as a landscape buffer to further shield the compound from the right of way and nearby properties. Lastly, seven (7) ten (10) foot tall Southern Live Oaks are to be installed to act as a secondary landscape buffer around the site.

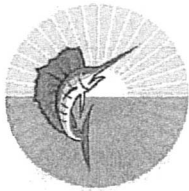
The applicant will install a sidewalk along North 21 Street in accordance with City Code 22-62. The tower itself will provide one antenna for T-Mobile as well as a T-Mobile support structure. According to the plans the tower has the capacity to support two additional antenna and two additional support structures on the ground. The pole is designed to have a twenty five (25) foot fall zone so that in the event of structural failure the pole would buckle in on itself and fall within twenty five (25) feet and remain on the parent tract.

**Technical Review Committee:**

All affected City Departments have reviewed the proposed Conditional Use with New Construction & Design Review and have provided conditional approval based on compliance with requirements of the City Code. The comments generated from the technical review are provided for review. The applicant has addressed each reviewers comment and has made the proper corrections. The applicant's response to comments generated by the reviewers will also be included for your review.

**Staff Recommendation:**

Staff recommends that the Planning Board forward a recommendation of approval for the Conditional Use with New Construction & Design Review to the City Commission



**DEVELOPMENT REVIEW**

Property address or Location 2006 ORANGE AVENUE  
Parcel ID #(s) 2409-605-0008-000-4  
Project description New Communication tower w/ compound

Lesley Phillips / Abdel Jebbar Elbakkari RG Towers, LLC

Property Owner(s)  
2006 Orange Ave  
Street Address

Ft Pierce FL 34950

City 772-595-8129 State FL Zip 34950

Phone Number amal0012012@gmail.com  
Email Address

Applicant/Representative, Title, Company  
2141 Alternate A1AS Ste 440

Street Address  
Jupiter, FL 33477

City 561-748-0302 State FL Zip 33477

Phone Number hvaldez@rgpartners.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. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.*

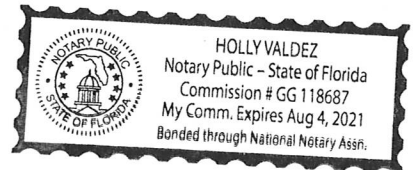
[Signature] Lesley Phillips  
Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY

The foregoing instrument was acknowledged before me this 21 day of Nov., 2017, by Lesley Phillips / Abdel Elbakkari who is personally known to me or has produced \_\_\_\_\_ as identification.

[Signature]  
Signature of Notary

(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 \_\_\_\_\_ 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			
<input checked="" type="checkbox"/> Site Plan	<input type="checkbox"/> Conditional Use with New Const.	<input type="checkbox"/> Major Amendment	
<input type="checkbox"/> Conceptual Development Plan		<input type="checkbox"/> Minor Amendment	

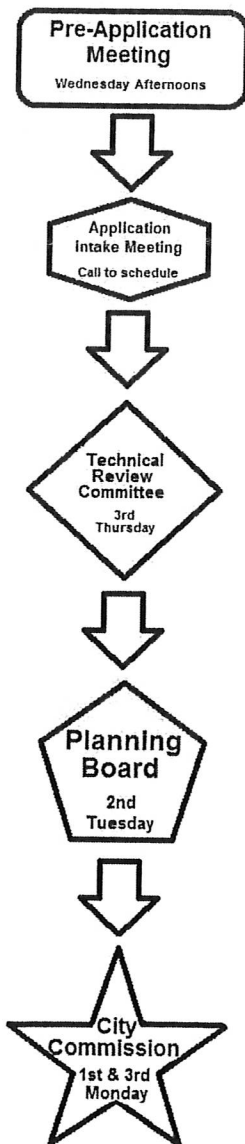
Site Information:

Non-Residential: Proposed Sq. Ft.: 2000 Residential: Proposed Units: 0

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

North	South	East	West
R3	C3	C3	C3

## 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)
- Lighting Plan (see Section 22-58.d.8)
- Design Review submittals (see Design Review application) **NA**
- Traffic Impact Report **NA**
- Concurrency Review submittals (see Concurrency Review application) **NA**



**Design Review**

Property address or Location 2006 Orange Ave  
 Parcel ID #(s) 2409-6005-0008-000-4  
 Project Description New Communication tower w/ compound

Abdel Jebbar Elbakkari <sup>Lestrey Phillips</sup>  
 Property Owner(s)  
2006 Orange Ave.  
 Street Address  
Ft Pierce FL 34950  
 City State Zip  
772-595-8129  
 Phone Number  
amal0012012@gmail.com  
 Email Address

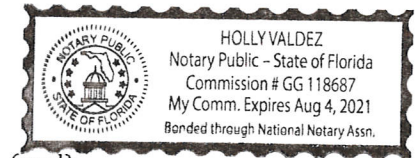
RG Towers, LLC  
 Applicant/Representative, Title, Company  
2141 Alt. A1AS. Ste 440  
 Street Address  
Jupiter FL 33477  
 City State Zip  
561-748-0302  
 Phone Number  
hvaldez@rgpartners.com  
 Email Address

*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 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.*

[Signature]  
 Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY  
 The foregoing instrument was acknowledged before me this 12 day of Dec., 2017, by  
Abdel Elbakkari  
Lestrey Phillips who is personally known to me or has produced  
 \_\_\_\_\_ as identification.

[Signature]  
 Signature of Notary



(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



10/20/17

RE: Zoning Review Section 22-159-B 7  
**Letter of intent. RG Towers Ft Pierce Orange Ave TC11**

Dear Sir/ Madam:

RG Towers, LLC is applying for approvals to build a 150' communications tower, which will be available for collocation in St Lucie County. The following information is provided pursuant to the requirements of the City of Fort Pierce Land Development Regulations Section 22-159 and notices have been provided to all major carriers.

-

Tower Height/Type	150' Monopole
Address	2006 Orange Ave, Fort Pierce, FL 34950
Coordinates	Approximately 27.447636, -80.345960
General Rate	Dependent upon height, loading and ground space required
Tentative Construction date	Q2, 2018

RG Towers, LLC and its successors will agree to the shared use of the tower if an additional user agrees, in writing, to meet reasonable terms and conditions for shared use

.

Sincerely,

Scott Richards  
CEO  
RG Towers, LLC



RG Towers, LLC

10/31/17

RE: RG Towers-Ft Pierce- Orange Ave Relevant Easements

Per the requirement of code Section 22-159 (b) 6 "Copies of Relevant Easements", we report that there are no relevant easements to this application per the title report dated 10/18/17.

- US TITLE SOLUTIONS FILE NO.58394-FL1710-5030  
REFERENCE NO. TC11 SITE NAME Ft Pierce- Orange Ave

Sincerely,

Holly Valdez  
V.P. Operations  
RG Towers, LLC

## TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

### \*\*\* NOTICE \*\*\*

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

#### DETERMINATION Results

**PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7049.71 MTRS (7.04969 KM) AWAY**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	27-30-15.00N	080-22-43.00W	TREASURE COAST INTL	ST LUCIE FORT PIERCE, FL	6.4	1978.8

**PASS SLOPE(100:1)NO FAA REQ - 5625.0 Meters (18454.5 Feet) away & below slope by 11.0 Meters (36.0900 Feet)**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	27-29-49.00N	080-21-34.00W	TREASURE COAST INTL	ST LUCIE FORT PIERCE, FL	6.4	1978.8

**PASS SLOPE(100:1)NO FAA REQ - 4655.0 Meters (15272.1 Feet)  
away & below slope by 1.0 Meters (3.27999 Feet)**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	27-29-14.00N	080-21-42.00W	TREASURE COAST INTL	ST LUCIE FORT PIERCE, FL	6.4	1978.8

### Your Specifications

#### NAD83 Coordinates

Latitude	27-26-51.5 north
Longitude	080-20-45.1 west

#### Measurements (Meters)

Overall Structure Height (AGL)	45.7
Support Structure Height (AGL)	45.7
Site Elevation (AMSL)	6

#### Structure Type

MTOWER - Monopole

#### [Tower Construction Notifications](#)

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

[CLOSE WINDOW](#)

# ***WSP Consultants, Inc.***

## **Surveyors & Mappers**

18815 Annelis Drive  
Lutz, FL 33548  
Phone: (813) 909-2420

---

### **F.A.A. 1A LETTER**

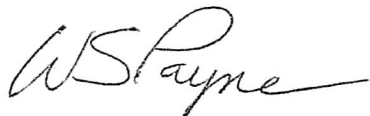
**Date:** October 16, 2017  
**For:** RG TOWERS, LLC  
**Site:** ORANGE AVENUE  
2006 Orange Avenue, Fort Pierce, FL 34950  
St. Lucie County, Florida

I certify that the Latitude 27°26'51.584" N and the Longitude of 080°20'45.150" W of the above referenced site is accurate to within  $\pm 15.0$  feet horizontally and that the site elevation of 19.8' (NAVD 88) is accurate to within  $\pm 3.0$  feet vertically.

The Latitude and Longitude as identified hereon are referenced to the North American Datum of 1983/2011 (NAD 83/2011) and are expressed as degrees, minutes and seconds. The elevations shown hereon in feet are referenced to the North American Vertical Datum of 1988 (NAVD 88).

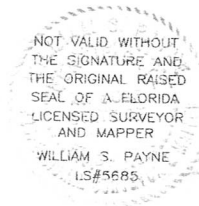
Note:

The Latitude, Longitude & Elevation were obtained at the Proposed Tower Location.



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**William S. Payne**  
**Professional Surveyor and Mapper No. 5685**  
**WSP Consultants, Inc. – LB No. 7188**  
**State of Florida**



**SEAL**

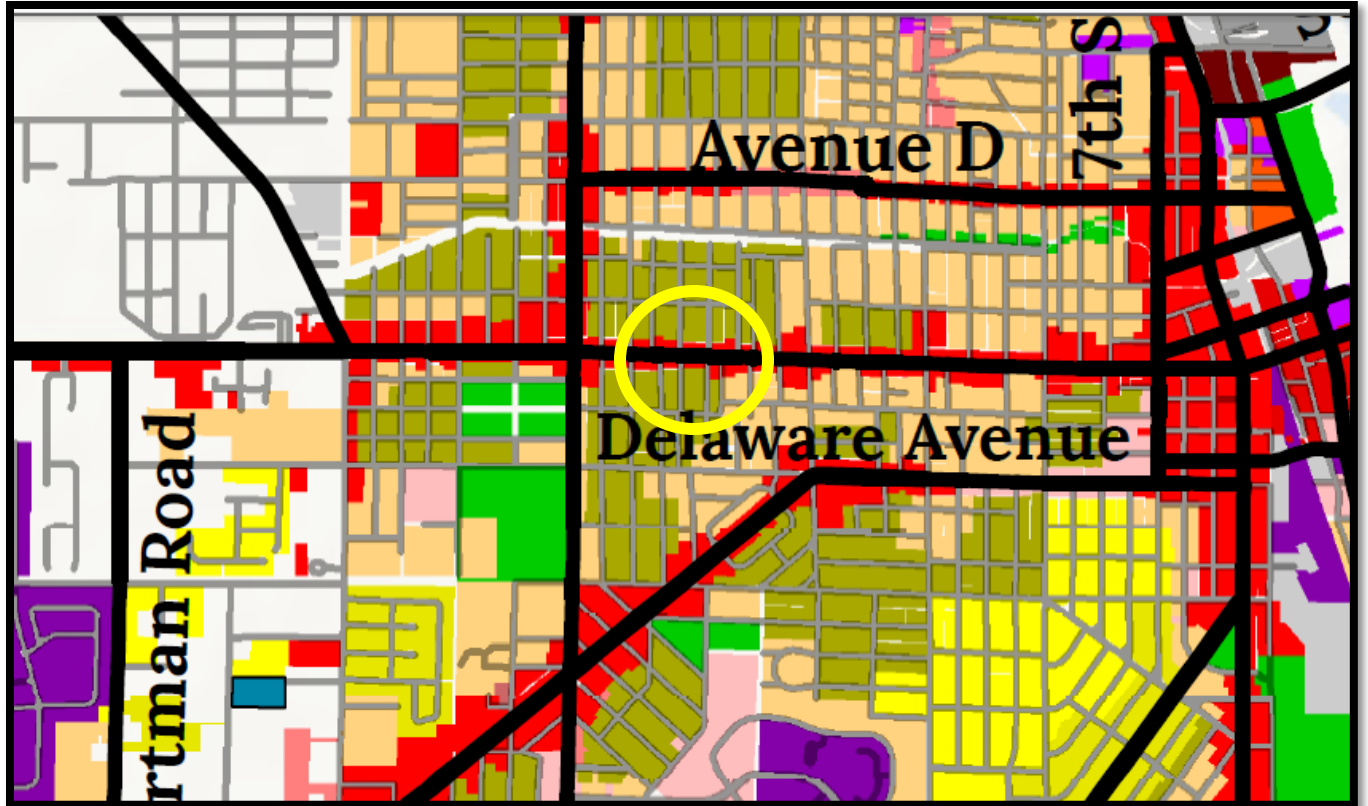


Section 22- 58.d.2

(2)

*A general location map which shows the approximate location of streets, street signals and vehicular access points to streets along streets abutting the proposed development, rights-of-way, zoning districts, existing land uses and important physical features (including drainage ways) within five hundred (500) feet of property proposed for development.*





**Zoning Districts**

<p><b>Residential Zoning</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #ADD8E6; border: 1px solid black; margin-right: 5px;"></span> E1, Single Family Estate Density</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #008080; border: 1px solid black; margin-right: 5px;"></span> E2, Residential Single Family, 2 Units/Acre</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #008000; border: 1px solid black; margin-right: 5px;"></span> E3, Residential Single Family, 3 Units/Acre</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></span> R1, Single Family Low Density</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #9ACD32; border: 1px solid black; margin-right: 5px;"></span> R2, Single Family Intermediate Density</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #8B4513; border: 1px solid black; margin-right: 5px;"></span> R3, Single Family Moderate Density</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FFD700; border: 1px solid black; margin-right: 5px;"></span> R4, Medium Density Residential</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FF8C00; border: 1px solid black; margin-right: 5px;"></span> R4A, Hutchinson Island Medium Density Residential</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FF4500; border: 1px solid black; margin-right: 5px;"></span> R5, High Density Residential</li> </ul> <p><b>Open Space Zoning</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #32CD32; border: 1px solid black; margin-right: 5px;"></span> OS1, General and Recreational Open Space</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #2E8B57; border: 1px solid black; margin-right: 5px;"></span> OS2, Conservation Open Space</li> </ul> <p><b>Planned Development Zoning</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #800080; border: 1px solid black; margin-right: 5px;"></span> PD, Planned Development</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FF00FF; border: 1px solid black; margin-right: 5px;"></span> PUR, Planned Urban Redevelopment</li> </ul>	<p><b>Commercial Zoning</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FFB6C1; border: 1px solid black; margin-right: 5px;"></span> C1, Office Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FF7F50; border: 1px solid black; margin-right: 5px;"></span> C2, Neighborhood Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FF0000; border: 1px solid black; margin-right: 5px;"></span> C3, General Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FF4500; border: 1px solid black; margin-right: 5px;"></span> C4, Central Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #8B0000; border: 1px solid black; margin-right: 5px;"></span> C5, Tourist Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #4B0082; border: 1px solid black; margin-right: 5px;"></span> C6, Marine Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #A52A2A; border: 1px solid black; margin-right: 5px;"></span> CP1, Commercial Parkway</li> </ul> <p><b>Industrial Zoning</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #D3D3D3; border: 1px solid black; margin-right: 5px;"></span> I1, Light Industrial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; border: 1px solid black; margin-right: 5px;"></span> I2, Marine Industrial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #696969; border: 1px solid black; margin-right: 5px;"></span> I3, Heavy Industrial</li> </ul> <p><b>Agriculture Zoning (County)</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, yellow 2px, yellow 4px); border: 1px solid black; margin-right: 5px;"></span> AR1, Agriculture, Residential - 1</li> <li><span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, lightblue 2px, lightblue 4px); border: 1px solid black; margin-right: 5px;"></span> AG1, Agriculture - 1</li> <li><span style="display: inline-block; width: 15px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, green 2px, green 4px); border: 1px solid black; margin-right: 5px;"></span> AG2.5, Agriculture - 2.5</li> </ul>
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**City of Fort Pierce**  
**Planning Department**  
 Created By: Brandon Creagan  
 Date Created: July 25, 2017



**RG Towers, LLC**

Ft Pierce Planning and Zoning  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

**RE: RG Towers – Ft Pierce- Orange Ave** Design Review Application Checklist (City Code of Ordinances 22-59)

**Attached please find the following for review and approval:**

- a. A survey -submitted with Development Review application
- b. A site analysis study – please refer to the landscape plan submitted with Development Review application
- 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- submitted with Development Review application
- h. Landscape plan, at the same scale as the site plan - submitted with Development Review application
- 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- elevation submitted with Development Review application
- 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- submitted with Development Review application
- c. A final site lighting plan that meets the requirements of subsection 22-58(d)(8)- NA
- d. A final landscape plan that meets the requirements of Article XII, Landscaping and Trees. - submitted with Development Review application
- 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. - submitted with Development Review application

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- no color-galvanized steel

Please let me know if you have any questions.

Sincerely,

Holly Valdez  
RG Towers, LLC  
V.P. Operations



**RG Towers, LLC**

Ft Pierce Planning and Zoning  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

**RE: RG Towers - Ft Pierce Orange Ave Character and Intended Use Statement**

RG Towers, LLC is applying for approval to build a 150' communications tower at the location shown below.

Tower Height/Type	150' Monopole
Address	2006 Orange Ave, Ft Pierce FL 34950
Coordinates	Approximately 27.447636, -80.345960

The parcel is currently owned by Lesley Phillips and Abdel Jebbar Elbakkari. RG Towers, LLC entered into a Lease Agreement dated 9/27/17.

The character of the parcel is completely commercial as seen in the attached photographs. The intended use will be the development of a 150' monopole communication tower with a fenced compound to enclose the auxiliary equipment. The fenced compound will be landscaped per the code. This is to be an unmanned facility with only semiannual visits for maintenance outside of initial construction.

Please let me know if you have any questions.

Sincerely,

Scott Richards  
RG Towers, LLC  
CEO

Michelle Franklin, CFA -- Saint Lucie County Property Appraiser -- All rights reserved.

## Property Identification

Site Address: 2006 ORANGE AVE  
 Sec/Town/Range: 09/35S/40E  
 Map ID: 24/09N  
 Zoning: C3

Parcel ID: 2409-605-0008-000-4  
 Account #: 22018  
 Use Type: 1100  
 Jurisdiction: Fort Pierce

## Ownership

Lesley Phillips  
 Abdel Jebbar Elbakkari  
 2006 Orange AVE  
 Fort Pierce, FL 34950



## Legal Description

FLORIANA PARK BLK 3 LOTS 3, 4 AND  
 5-LESS S 15 FT FOR ST- (OR 3822-1761)

## Current Values

Just/Market Value: \$84,600  
 Assessed Value: \$84,600  
 Exemptions: \$0  
 Taxable Value: \$84,600  
 Taxes for this parcel: SLC Tax Collector's  
 Office [📄](#)  
 Download TRIM for this parcel: [Download PDF](#) [📄](#)

## Total Areas

Finished/Under Air (SF):	2,160
Gross Area (SF):	2,430
Land Size (acres):	0.45
Land Size (SF):	19,656

## Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Dec 24, 2015	3822 / 1761	0002	WD	Walker (TR) John C	\$83,600
Nov 5, 2015	3805 / 1827	0111	CT	LeDain Marie M	\$100
Jun 25, 2014	3652 / 2867	0137	WD	Walker (TR),John C	\$120,000
Jun 3, 2014	3638 / 1302	0111	CT	LeDain,Marie M	\$60,300
May 25, 2005	2255 / 2189	XX01	QC	Blanc,Jean C	\$100

Apr 30, 2004	1971 / 3007	XX00 WD	Dunn Brothers Inc,	\$120,000
Nov 1, 1981	0366 / 2466	XX00 CV		\$125,000

## Building Information (1 of 1)

Finished Area: 2,160 SF

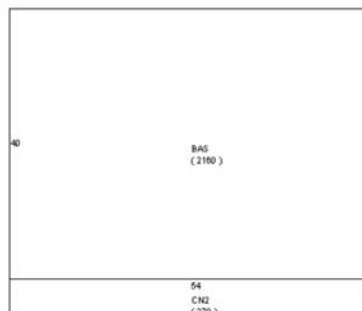
Gross Total Area: 2,430 SF

### Exterior Data

View:	Roof Cover: Tar & Gravel	Roof Structure: Flat/Shed
Building Type: STRL	Year Built: 1957	Frame:
Grade: Y_C	Effective Year: 1970	Primary Wall: Conc Block
Story Height: 1 Story	No. Units: 2	Secondary Wall:

### Interior Data

Bedrooms: 0	Electric: MAXIMUM	Primary Int Wall:
Full Baths: 0	Heat Type: FrcdHotAir	Avg Hgt/Floor: 0
Half Baths: 0	Heat Fuel: ELEC	Primary Floors: Vinyl Tiles
A/C %: 100%	Heated %: 100%	Sprinkled %: 0%



### Sketch Area Legend

Sub Area	Description	Area	Fin. Area	Perimeter
BAS	BASE AREA	2160	2160	188
CN2	CANOPY	270	0	118

## Special Features and Yard Items

Type	Qty	Units	Year Blt
CEMENT CURB	1	42	1970
ASP2 LOW	1	5409	1970

## Current Year Values

## Current Values Breakdown


Building:	\$40,400
Land:	\$44,200
Just/Market:	\$84,600
Ag Credit:	\$0
Save Our Homes or 10% Cap:	\$0
Assessed:	\$84,600
Exemption(s):	\$0
Taxable:	\$84,600

## Current Year Exemption Value Breakdown

Tax Year	Grant Year	Code	Description	Amount
----------	------------	------	-------------	--------

## Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
1999	0041	4.9	Fort Pierce Stormwater Charge	\$264.60

This does not necessarily represent the total Special Assessments 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
2017	\$84,600	\$84,600	\$0	\$84,600
2016	\$84,300	\$84,300	\$0	\$84,300
2015	\$105,200	\$105,200	\$0	\$105,200

## Permits

Number	Issue Date	Description	Amount	Fee
BP2006-90	Jan 25, 2006	Roof	\$5,000	\$50
F900001019	Aug 7, 1990	Roof	\$900	\$900
0900025541	Nov 16, 2007	Sprinkler System	\$0	\$50
BP11-1029	Jun 9, 2011	Electric	\$104	\$155
BP16-1588	Jun 23, 2016	Alterations/Remodeling	\$4,000	\$0

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

This information is believed to be correct at this time but it is subject to change and is not warranted.  
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Prepared by  
Kimberly Douglas, an employee of  
First American Title Insurance Company  
729 South Federal Highway, Ste 103  
Stuart, Florida 34994  
(772)286-0850

Return to: Grantee

File No.: 2071-2258822  
Consideration: \$83,600.00

## **WARRANTY DEED**

This indenture made on **December 30, 2015** A.D., by

**John C. Walker, as Trustee of the John C. Walker Trust dated July 26, 1994**

whose address is: **364 River Edge Road, Jupiter, FL 33477**  
hereinafter called the "grantor", to

**Lesley Phillips and Abdel Jebbar ElBakkari, wife and husband**

whose address is: **2006 Orange Ave, Fort Pierce, FL 34950**  
hereinafter called the "grantee":

(Which terms "Grantor" and "Grantee" shall include singular or plural, corporation or individual, and either sex, and shall include heirs, legal representatives, successors and assigns of the same)

**Witnesseth**, that the grantor, for and in consideration of the sum of Ten Dollars, (\$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**, to-wit:

Lots 3, 4 and 5 less the South 15 feet thereof, Block 3 of FLORIANA PARK, according to the Plat thereof as recorded in Plat Book 2, page 7C, of the Public Records of St. Lucie County, Florida.

Parcel Identification Number: **2409-605-0008-000/4**

**Subject to** all reservations, covenants, conditions, restrictions and easements of record and to all applicable zoning ordinances and/or restrictions imposed by governmental authorities, if any.

TOGETHER WITH all singular the tenements, hereditaments and appurtenances belonging to or in anywise appertaining to that real property.

AND the party of the first part does covenant to and with the party of the second part, their heirs and assigns, that in all things preliminary to and in and about the sale and this conveyance the Laws of Florida have been followed and complied with in all respects. .

In Witness Whereof, the parties of the first part have hereunto set their hand(s) and seal(s) the day and year first above written.

*John C. Walker*  
John C. Walker, individually and as Trustee of the John C. Walker Trust dated July 26, 1994

Signed, sealed and delivered in the presence of these witnesses:

*Kim Douglas*  
Witness Signature

Print Name: *Kim Douglas*

*Toni Lynn Turner*  
Witness Signature

Print Name: *Toni-Lynn Turner*

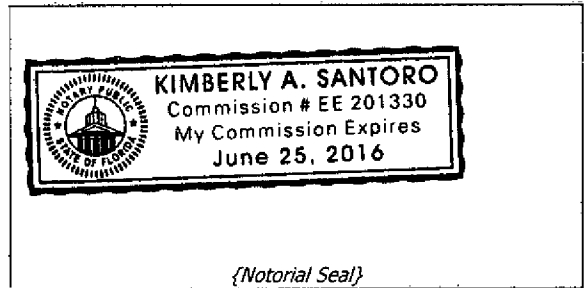
State of **Florida**

County of **Martin**

**THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED** before me on **December 24<sup>th</sup>, 2015**, by **John C. Walker, a single man, individually and as Trustee of the John C. Walker Trust dated July 26, 1994** who is/are personally known to me or has/have produced a valid driver's license as identification.

Kimberly A. Santoro  
Notary Public

Kimberly A. Santoro  
(Printed Name)



My Commission expires: \_\_\_\_\_

# Michael F. Plahovinsak, P.E.

18301 State Route 161, Plain City, Ohio 43064

(614) 398-6250 - mike@mfpeng.com

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December 4, 2017

## RG Towers

Re: Proposed 150-ft Monopole  
Located in Saint Lucie Co., FL: TC11 Ft. Pierce Orange Ave.  
MFP Project #: 23517-765 / TAPP Project Number: TP-15913

I understand that there may be some concern on the part of local building officials regarding the potential for failure of the proposed communication monopole. Communication structures are designed in accordance with the Telecommunications Industry Association ANSI/TIA-222-G, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures". This Structure is to be fabricated by TransAmerican Power Products

I have designed this monopole to withstand a 3-sec. gusted wind speed of 123 mph (Vasd) as recommended by ANSI/TIA-222-G for Saint Lucie Co., FL. The design also conforms to the requirements of the 2014 Florida Building Code for an equivalent ultimate wind speed of 159 mph (Vult).

This monopole has been designed to accommodate a theoretical fall radius. The upper 25' of the pole has been designed to meet the wind loads of the design, however, the lower portion of the pole has been designed with a minimum 10% extra capacity. Assuming the pole has been designed according to my design, and well maintained, in the event of a failure due to extreme wind and comparable appurtenance antenna load (winds in excess of the design wind load), it would yield/buckle at the 125' elevation. The yielded section would result in a maximum 25' fall radius, but would most likely remain connected and hang from the standing section.

The structure has been designed with all of the applicable factors as required by the code. A properly designed, constructed and maintained pole has never collapsed; monopoles are safe structures with a long history of reliable operation.

I hope this review of the monopole design has given you a greater degree of comfort regarding the design capacity inherent in pole structures. If you have any additional questions please call me at 614-398-6250 or email mike@mfpeng.com.

Sincerely,

Michael F. Plahovinsak, P.E.



---

Michael F. Plahovinsak, P.E.  
Sole Proprietor - Independent Engineer  
P.E. Licensed in 48 Jurisdictions



## SITE LICENSE AGREEMENT

This Site License Agreement ("SLA") is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2017 ("SLA Effective Date") between RG Towers, LLC, hereinafter designated as LICENSOR, and T-Mobile South LLC, hereinafter designated as LICENSEE.

1. Integration with Master Lease Agreement: This SLA is entered into pursuant to that certain Master License Agreement between T-MOBILE CENTRAL LLC, T-MOBILE SOUTH LLC, T-MOBILE WEST LLC, T-MOBILE PUERTO RICO LLC, and POWERTEL/MEMPHIS, Inc. and RG Towers, LLC dated October 1, 2012 ("MLA"). All of the terms and conditions of the MLA are incorporated herein by this reference and made a part hereof without the necessity of repeating or attaching the MLA. Except as set forth in the MLA, in the event of a contradiction, modification or inconsistency between the terms of the MLA and this SLA, the terms of the MLA shall govern. Capitalized terms used in this SLA shall have the same meaning described for them in the MLA unless otherwise indicated herein.

2. Site Number and Name (if applicable):

LICENSOR:TC11 Fort Pierce Orange Ave

LICENSEE: A2P0227B

3. Site Address and Legal Description: More particularly described in Attachment 1, attached hereto and incorporated herein.

4. Site Latitude and Longitude: 27.447662, -80.345875

5. Description of Antenna Facilities: LICENSEE Antenna Facilities to be placed on the Property and the location of the Premises are detailed in and shall be consistent with Attachment 2, attached hereto and incorporated herein.

6. Term: The term of this SLA shall be as set forth in Section 2(b) of the MLA and commence upon either [check one box]:

The earlier of (i) two hundred seventy (270) days after the SLA Effective Date; or (ii) the date of the Notice to Proceed under Section 10(a) of the MLA; or

\_\_\_\_\_ 2017

7. Rent Commencement: The first payment of Rent shall be due on the SLA Commencement Date.

8. Rent Amount: The monthly Rent for the initial term of this SLA shall be to be paid on the first day of the month, in advance, to LICENSOR at the following address: 2141 Alternate A1A South, Suite 440, Jupiter, FL 33477; or to such other person, firm or place as LICENSOR may, from time to time, designate in writing at least thirty (30) days in advance of any rental payment date.

9. Prime Lease. If the Property is subject to a Prime Lease, a copy of such agreement is attached hereto as Attachment 3. If consent is required from the Owner, it is attached hereto as Attachment 4.

10. Licensor Contact for Emergency (not for legal notices): RG Towers, LLC

11. Licensee Contact for Emergency (not for legal notices):

12. Special Provisions (insert any special provisions):

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals the day and year first above written.

LICENSOR: RG Towers, LLC

\_\_\_\_\_

BY: \_\_\_\_\_

WITNESS

PRINT NAME: Scott Richards

\_\_\_\_\_

TITLE: CEO

WITNESS

DATE: \_\_\_\_\_

LICENSEE: T-Mobile South LLC

\_\_\_\_\_

BY: \_\_\_\_\_

WITNESS

PRINT NAME:

\_\_\_\_\_

TITLE:

WITNESS

DATE: \_\_\_\_\_

ATTACHMENTS:

- Attachment 1: Legal Description of Land
- Attachment 2: Licensor's Application Form Completed by Licensee
- Attachment 3: Prime Lease
- Attachment 4: Owner's Consent
- Attachment 5: Memorandum of Site License Agreement
- Attachment 6: Approved Plans

**Attachment 1: Legal Description of Land**

Legal Description of Land

PARENT TRACT

(PER OFFICIAL RECORD BOOK 3822, PAGE 1761 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA)

LOTS 3, 4 AND 5, LESS THE SOUTH 15 FEET THEREOF, BLOCK 3 OF FLORIANA PARK, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE 7C, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

**Attachment 2: Licensor's Application Form Completed by Licensee**

**COLLOCATION APPLICATION**

**RG Towers, LLC**  
 2141 Alternate A1A South  
 Suite 440  
 Jupiter, Florida 33477  
 Phone: (561) 748-0302 Fax: (561) 748-0303  
 E-mail inquiries or applications to: [hginn@rgpartners.com](mailto:hginn@rgpartners.com)  
 Contact: Harlan Ginn 561-309-8072

PLEASE COMPLETE THE FOLLOWING APPLICATION FOR THE SITE YOU ARE INTERESTED IN CONSTRUCTING OR INSTALLING UPON. THIS INFORMATION IS USED TO ASSESS OCCUPANCY SUITABILITY AND FOR PREPARATION OF THE AGREEMENT. THE APPLICATION MUST BE COMPLETED IN ITS ENTIRETY.

<b>DATE SUBMITTED</b>	12-4-17
-----------------------	---------

LESSEE INFORMATION (as it should appear on the agreement)					
Company Name:	T-Mobile South LLC				
Street Address:	1300 Concord Terrace, Suite 200				
City:	Sunrise	State:	FL	Zip:	33323
Phone:	(954) 693-7209	Fax:	954-693-7209		
Entity Type (Partnership, Corporation., etc):	LLC				

LESSEE LEGAL NOTICE INFORMATION (additional notice)					
Company Name:	T-Mobile				
Point of Contact:	Attn: Legal				
Street Address:	12920 SE 38 <sup>th</sup> Street				
City:	Bellevue	State:	WA	Zip:	98006
Phone:	-	ext.:	-	Fax:	-

CARRIER CONTACT INFORMATION (market contact of lessee)					
Company Name:	T-Mobile				
Point of Contact:	Patrick Keane				
Street Address:	1300 Concord Terrace, Suite 200				
City:	Sunrise	State:	FL	Zip:	33323
Phone:	(954) 514-8076	Fax:	-		
E-mail:	Patrick.keane@t-mobile.com				

BILLING INFORMATION (if different from lessee information)					
Company Name:	T-Mobile				
Point of Contact:					
Street Address:	12920 SE 38 <sup>th</sup> Street				
City:		State:		Zip:	
Phone:	.	Fax:	-		
E-mail:	@ .				

CUSTOMER REPRESENTATIVE/SITE ACQUISITION CONTACT INFORMATION (main point of contact for application information)					
Company Name:	RG Towers, LLC				
Point of Contact:	Harlan Ginn				
Street Address:	2141 Alternate A1A South, Suite 440				
City:	Jupiter	State:	FL	Zip:	33477
Phone Number:	(561) 309-8072	Fax:	561-748-0303		
E-mail:	hginn@rgpartners.com				

SITE INFORMATION					
RG Towers Site ID:	TC11	Lessee Site ID:	A2P0227B		
RG Towers Site Name:	Ft. Pierce- Orange Ave.	Lessee Site Name:			
Street Address:	2006 Orange Ave.				
City:	Ft. Pierce	County:	St. Lucie	State:	FL
Latitude (NAD 83):	27.447662	Longitude (NAD 83):	-80.345875		
Tower Height/Type:	150' Monopole	Desired Installation Date:			

**DETAILED DESCRIPTION OF PROPOSED INSTALLATION / SPECIAL INSTRUCTIONS**

150' Monopole. T-Mobile to install 4 Sector array, within the 140 ft and 150 ft height level  
 Initial Equipment Configuration:  
 (12) Quad Antennas (Cellmax- CMA-BDHH/3321)  
 (3) Quad Antennas (Commscope- FF-65C-R1)  
 (15) RRUs  
 (2) Hybrid Cables  
 (2) Large COVPs  
 (4) Equipment Cabinets  
 (1) Generator  
 200 Square Feet of Ground Space

**ANTENNAS & TRANSMISSION LINES**

Lessee Owned Antennas	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5	Sector 6
Antenna Height ACL	145'	145'	145'	145'		
Antenna Quantity	3/1	3/1	3/1	3		
Antenna Manufacturer	Cellmax/Commscope	Cellmax/Commscope	Cellmax/Commscope	Cellmax		
Antenna Model (Attach Spec Sheet)	CMA-BDHH/321 FF-65C-R1	CMA-BDHH/321 FF-65C-R1	CMA-BDHH/321 FF-65C-R1	CMA-BDHH/321		
Antenna Dimensions & Weight	L 40.6" x W 23.2" x D 6.1", 59 lbs/L 95.9" x W 25.2" x D 9.3", 117.9 lbs	L 72" x W 25.2" x D 9.3", 99.2 lbs L 95.9" x W 25.2" x D 9.3", 117.9 lbs	L 72" x W 25.2" x D 9.3", 99.2 lbs L 95.9" x W 25.2" x D 9.3", 117.9 lbs	L 40.6" x W 23.2" x D 6.1", 59 lbs		
Antenna - Upright/Inverted						
ERP (Watts)						
Azimuth	45	135	225	315		
Antenna Mount Type						
<b>TMA or RRU or COVP</b>	5 RRUs, 1 COVP	5 RRUs, 1 COVP	3 RRUs	2 RRUs		
Manufacturer	AirScale, Flexi,Nokia,Raycap	AirScale, Flexi,Nokia,Raycap	AirScale, Flexi, Nokia	AirScale, Flexi		
Model	(2) FRIJ, (2) FHFB, (1) AHLOA, ASU9338TYP01	(2) FRIJ, (2) FHFB, (1) AHLOA, ASU9338TYP01	(1) FRIJ, (1) FHFB, (1) AHLOA	(1) FRIJ, (1) FHFB		
Dimensions	L 24.8" x W 16.1" x D 5.0", 46.3 lbs/L 34.3" x W 12.6" x D 7.8", 68.5 lbs/L 22"x W 12 x D 7.4", 83.6 lbs./L 20.38" x W 18.86" x D 5.83", 19 lbs	L 24.8" x W 16.1" x D 5.0", 46.3 lbs/L 34.3" x W 12.6" x D 7.8", 68.5 lbs/L 22"x W 12 x D 7.4", 83.6 lbs./L 20.38" x W 18.86" x D 5.83", 19 lbs	L 24.8" x W 16.1" x D 5.0", 46.3 lbs/L 34.3" x W 12.6" x D 7.8", 68.5 lbs/L 22"x W 12 x D 7.4", 83.6 lbs	L 24.8" x W 16.1" x D 5.0", 46.3 lbs/L 34.3" x W 12.6" x D 7.8", 68.5 lbs		
Number of Transmission Lines	1	1				
Diameter of Transmission Lines	1.58"	1.58"				
<b>Satellite/GPS Antennas</b>						
Model:		Size:		Mounting:		Mounting Height (if on tower):
GPS:	(Select)	Mounting Height (if on tower):				

**GROUND EQUIPMENT**

Dimensions of Lessee's Building or Pad:	10' x 20'	Total Ground Space:	200 Square Feet	2 COVPs
Power Requirements (volts):		HVAC Requirements (BTU):	AC Meter:	(Select)
Required AC Breaker (amps):		Maximum AC Current Draw @ Given Line Voltage (amps):		
Back Up Power Required?	(Select)	Back Up Power Space	' x '	Kilowatt Output: 30 kW
Generator Make:	Generac	Generator Model:	SD030	Generator Dimensions: 76' x 36' x 46'

Fuel/Type Containment:	Diesel	Fuel Tank Capacity:		Fuel Tank Dimension:	' x '
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<b>FREQUENCY</b>			
<b>Technology Type</b>	<b>Tx Frequencies</b>	<b>Rx Frequencies</b>	<b>Transmit Power (watts)</b>
<b>PCS UMTS</b>	1965-1990 MHz	1885-1910 MHz	W
<b>AWS LTE</b>	2135-2155 MHz	1735-1755 MHz	W
<b>700 MHz</b>	728-734 MHz	698-704 MHz	W
<b>(Select Other)</b>			W
Call Sign:		FCC License Expiration Date:	



RG Towers, LLC

10/20/17

**RE: RG Towers-Ft Pierce- Orange Ave Affidavit 22-163-An affidavit from the property owner or applicant acknowledging acceptance of the requirements of section 22-163**

RG Towers, LLC., applicant for the construction of a new communication tower, acknowledges the requirement per Section 22-163 for the removal of abandoned antenna support structure.

It is understood that prior to building permit we shall submit required documentation.

(a)

*At time of building permit the applicant shall enter into a contractually enforceable agreement with the city which requires the applicant or the owner of the antenna support structure to remove the antenna support structure upon its abandonment.*

(b)

*Prior to issuance of any permit in accordance with this article, the property owner or tower operator shall submit a bond, surety or other financial guaranty for the use and benefit of the city, to ensure the removal of abandoned communication towers. The form of surety shall be subject to approval by the director of planning and the city attorney. The required surety shall be irrevocable, unless released by the city. The surety shall be utilized to cover the costs of removal and disposal of abandoned towers and shall consist of the following:*

(1)

*Submittals of an estimate from a certified structural engineer indicating the costs to remove and dispose of the tower;*

(2)

*A surety equivalent to one hundred (100) per cent of the estimated costs to remove and dispose of the tower.*

*The planning director, subject to review by the city attorney, may accept documentation from a tower operator or property owner that adequate resources or irrevocable contract obligations are available to remove obsolete or abandoned communication towers.*

(c)

*In the event all legally approved use of any antenna support structure has been discontinued for a period of one hundred eighty (180) consecutive days, the antenna support structure shall be deemed abandoned. Determination of the date of abandonment shall be made by the department of code enforcement, which may request suitable documentation from the owner of the antenna support structure regarding any matter relating to whether the antenna support structure is currently being used or not;*

(d)

*At such time as the department of code enforcement determines that an antenna support structure is abandoned, it shall provide the antenna support structure owner with written notice of an abandonment determination by certified mail. Failure or refusal by the owner to respond within sixty (60) days of receipt of such notice, shall constitute prima facie evidence that the antenna support structure has been abandoned.*

*(e)*

*If the owner of the antenna support structure fails to respond or fails to demonstrate that the antenna support structure is not abandoned, the antenna support structure shall be considered abandoned and the owner of the antenna support structure shall have an additional one hundred twenty (120) days within which to:*

*(1)*

*Reactivate the use of the antenna support structure or transfer the antenna support structure to another owner who makes actual use of the antenna support structure within the one hundred twenty (120) day period; or*

*(2)*

*Dismantle and remove the antenna support structure. At the earlier of one hundred twenty-one (121) days from the date of abandonment without reactivation or upon completion of dismantling and removal, any special exception approval for the antenna support structure shall automatically expire.*

*(Ord. No. J-452, § 1, 9-21-98)*

Sincerely,

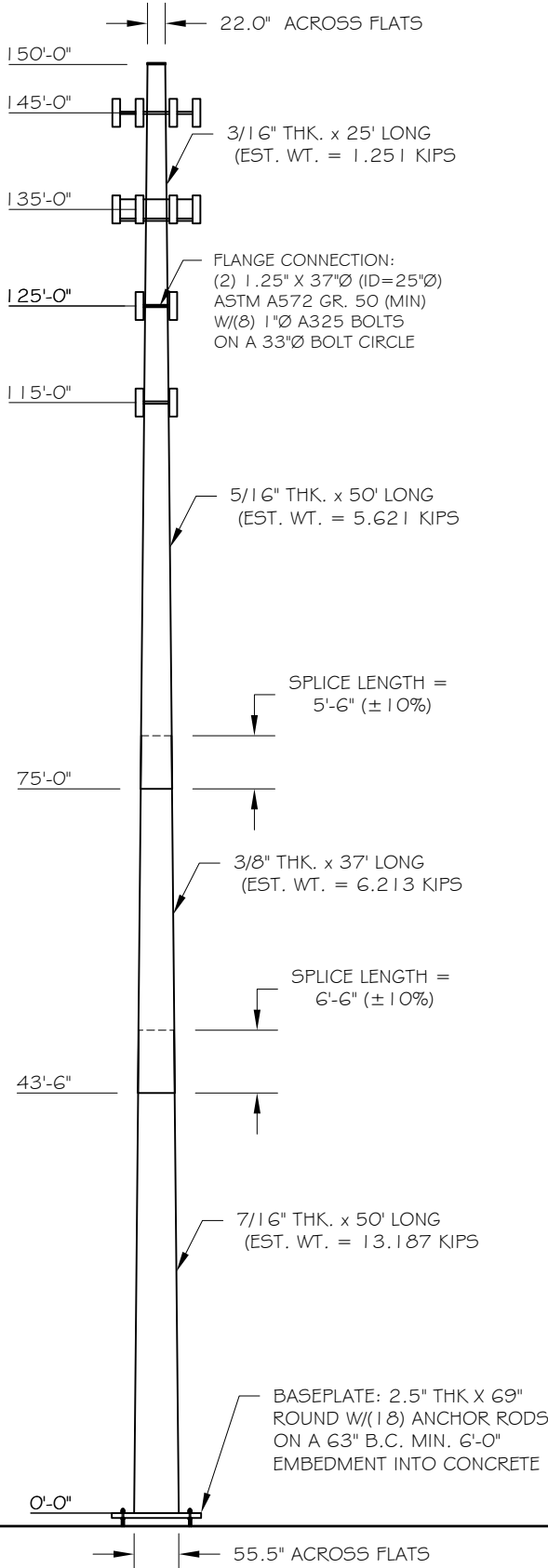
Scott Richards  
CEO  
RG Towers, LLC



# TransAmerican Power Products, Inc.

2427 Kelly Lane  
Houston, Texas 77068

PH: 281-444-8277 / FX: 281-444-7270



Page 1 of 2	Job Number: 23517-765
Eng: MFP	Customer Ref: TP-15913
	Date: 12/4/2017
Structure: 150-FT MONOPOLE	
Site: TC 11 FT. PIERCE ORANGE AVE.	
Location: SAINT LUCIE CO., FL / 27°26'52", -80°20'45"	
Owner: RG TOWERS	
Revision No.:      Revision Date:	

DESIGN			
Building Code: 2014 FLORIDA BUILDING CODE			
Design Standard: ANSI/TIA-222-G-2			
Wind Speed Load Cases: 3-SEC. GUSTED WIND SPEED			
Load Case #1: 123 MPH Design Wind Speed			
Load Case #2: 60 MPH Service Wind Speed			
POLE DESIGNED FOR AN EQUIVALENT (V <sub>ULT</sub> ) 159 MPH ULTIMATE WIND SPEED			
Structure Class	Exposure Cat.	Topography Cat.	Crest Height
II	C	I	

EQUIPMENT LIST	
Elev.	Description
145	(4) FASB ANTENNA + (4) RRU
145	12-FT LOW PROFILE PLATFORM
135	(6) X7CQAP-FRO-845 ANTENNA + (3) RRU
135	12-FT PLATFORM WITH HANDRAIL
125	(3) ET-X-UW-G8-14-G5-18 ANTENNA + (15) RRU/RAYCAP
125	FLUSH MOUNTS
115	(3) ET-X-UW-G8-14-G5-18 ANTENNA + (15) RRU/RAYCAP
115	FLUSH MOUNTS

ANTENNA FEED LINES ROUTED ON THE INSIDE OF THE POLE  
POLE DESIGNED FOR A MAX 25-FT FALL RADIUS

STRUCTURE PROPERTIES					
Cross-Section: 18-Sided			Taper: 0.23250 in/ft		
Shaft Steel: ASTM A572 GR 65			Baseplate Steel: ASTM A572 GR 50		
Anchor Rods: 2.25 in. AG 15 GR. 75 X 7'-0" LONG					
Sect.	Length (ft)	Thickness (in)	Splice (ft)	Top Dia. (in)	Bot Dia. (in)
1	25.00	0.1875	0.00	22.00	27.81
2	50.00	0.3125	5.50	27.81	39.44
3	37.00	0.3750	6.50	37.53	46.14
4	50.00	0.4375	0.00	43.88	55.50



MICHAEL F. PLAHOVINSAK, P.E. #66723  
Sole Proprietor - Independent Engineer  
18301 S.R. 161, Plain City, OH 43064  
614-398-6250 / mike@mfpeng.com

## BASE REACTIONS FOR FOUNDATION DESIGN

Moment: 5660 ft-kip  
Shear: 53 kip  
Axial: 51 kip



# TransAmerican Power Products, Inc.

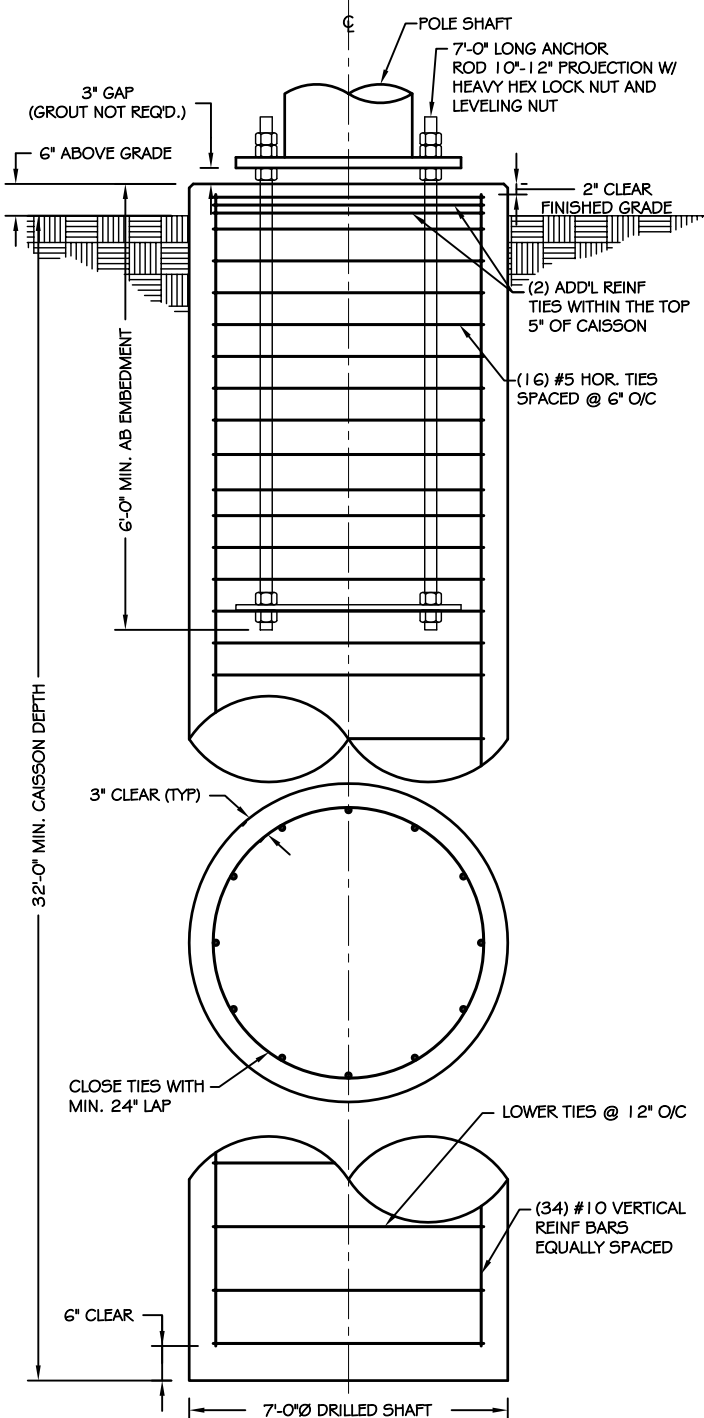
2427 Kelly Lane  
Houston, Texas 77068

PH: 281-444-8277 / FX: 281-444-7270

Page 2 of 2	Job Number: 23517-765
Eng: MFP	Customer Ref: TP-15913
	Date: 12/4/2017
Structure: 150-FT MONOPOLE	
Site: TC 11 FT. PIERCE ORANGE AVE.	
Location: SAINT LUCIE CO., FL / 27°26'52", -80°20'45"	
Owner: RG TOWERS	
Revision No.:      Revision Date:	

### FOUNDATION NOTES:

- ALL FOUNDATION CONCRETE SHALL USE TYPE II CEMENT AND ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.46 AND SHALL BE AIR ENTRAINED 6% ( $\pm 1.5\%$ ). ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318, "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", LATEST EDITION.
  - ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 VERTICAL BARS SHALL BE GRADE 60, AND TIES OR STIRRUPS SHALL BE A MINIMUM OF GRADE 40. THE PLACEMENT OF ALL REINFORCEMENT SHALL CONFORM TO ACI 315, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.
  - CAISSON FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 336, "STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF DRILLED PIERS", LATEST EDITION.
  - THE CONTRACTOR SHALL DETERMINE THE MEANS AND METHODS TO SUPPORT THE EXCAVATION DURING CONSTRUCTION. THE CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT AND SHALL CONSULT THE GEOTECHNICAL ENGINEER AS NECESSARY PRIOR TO CONSTRUCTION.
  - FOUNDATION DESIGN IS BASED ON GEOTECHNICAL REPORT BY:  
ENGINEER: ENVIRONMENTAL CORP OF AMERICA  
REPORT NO.: R1386 (DATED 1/4/16)
- PLEASE NOTE - THE SOILS REPORT USED FOR THIS DESIGN IS BASED ON A SITE WITHIN THE SAME CITY AS THIS SITE. A SITE SPECIFIC SOILS INVESTIGATION SHALL BE COMPLETED AND REVIEWED PRIOR TO FINAL CONSTRUCTION.
- ESTIMATED CONCRETE VOLUME = 46 CUBIC YARDS.
  - THE FOUNDATION HAS BEEN DESIGNED TO RESIST THE FOLLOWING FACTORED LOADS:  
MOMENT: 5660 FT\*KIPS  
SHEAR: 53 KIPS  
AXIAL: 51 KIPS
  - GEOTECHNICAL REPORT INDICATES GROUNDWATER MAY BE ENCOUNTERED AT 2'-6" BELOW GRADE.



## CAISSON FOUNDATION

NOT TO SCALE



MICHAEL F. PLAHOVINSAK, P.E. #66723  
Sole Proprietor - Independent Engineer  
18301 S.R. 161, Plain City, OH 43064  
614-398-6250 / mike@mfpeng.com

<b>tnxTower</b>  <b>Michael F. Plahovinsak, P.E.</b> 18301 State Route 161 Plain City, OH 43064 Phone: 614-398-6250 FAX: mike@mfpeng.com	<b>Job</b> 150-ft Monopole - MFP #23517-765 r1	<b>Page</b> 1 of 6
	<b>Project</b> TC11 Ft. Pierce Orange Ave.	<b>Date</b> 10:23:51 12/04/17
	<b>Client</b> TP-15913	<b>Designed by</b> Mike

## Tower Input Data

This tower is designed using the TIA-222-G standard.

The following design criteria apply:

Tower is located in Saint Lucie County, Florida.

Basic wind speed of 123 mph.

Structure Class II.

Exposure Category C.

Topographic Category 1.

Crest Height 0.00 ft.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

## Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	150.00-125.00	25.00	0.00	18	22.0000	27.8100	0.1875	0.7500	A572-65 (65 ksi)
L2	125.00-75.00	50.00	5.50	18	27.8100	39.4400	0.3125	1.2500	A572-65 (65 ksi)
L3	75.00-43.50	37.00	6.50	18	37.5357	46.1400	0.3750	1.5000	A572-65 (65 ksi)
L4	43.50-0.00	50.00		18	43.8784	55.5000	0.4375	1.7500	A572-65 (65 ksi)

## Tapered Pole Properties

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	It/Q in <sup>2</sup>	w in	w/t
L1	22.3394	12.9812	780.3007	7.7434	11.1760	69.8193	1561.6281	6.4918	3.5420	18.891
	28.2390	16.4388	1584.6545	9.8060	14.1275	112.1682	3171.3942	8.2210	4.5646	24.344
L2	28.2390	27.2741	2605.3977	9.7616	14.1275	184.4206	5214.2237	13.6396	4.3446	13.903
	40.0484	38.8096	7506.5554	13.8903	20.0355	374.6624	15022.9881	19.4085	6.3914	20.453
L3	39.4135	44.2305	7716.6233	13.1920	19.0681	404.6868	15443.4003	22.1195	5.9463	15.857
	46.8518	54.4718	14413.7186	16.2466	23.4391	614.9428	28846.4032	27.2411	7.4606	19.895
L4	46.0894	60.3232	14382.0201	15.4215	22.2902	645.2159	28782.9645	30.1673	6.9526	15.892
	56.3562	76.4612	29288.0331	19.5472	28.1940	1038.8038	58614.6042	38.2378	8.9980	20.567

## Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		C <sub>AA</sub> ft <sup>2</sup> /ft	Weight plf
1 5/8"	C	No	Inside Pole	145.00 - 0.00	18	No Ice	0.00	0.92
1 5/8"	C	No	Inside Pole	135.00 - 0.00	18	No Ice	0.00	0.92
1 5/8"	C	No	Inside Pole	125.00 - 0.00	18	No Ice	0.00	0.92
1 5/8"	C	No	Inside Pole	115.00 - 0.00	18	No Ice	0.00	0.92

<b>tnxTower</b>  <b>Michael F. Plahovinsak, P.E.</b> 18301 State Route 161 Plain City, OH 43064 Phone: 614-398-6250 FAX: mike@mfpeng.com	<b>Job</b>	150-ft Monopole - MFP #23517-765 r1	<b>Page</b>	2 of 6
	<b>Project</b>	TC11 Ft. Pierce Orange Ave.	<b>Date</b>	10:23:51 12/04/17
	<b>Client</b>	TP-15913	<b>Designed by</b>	Mike

## Discrete Tower Loads

<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horz Lateral Vert ft ft ft</i>	<i>Azimuth Adjustment °</i>	<i>Placement ft</i>		<i>C<sub>A</sub>A<sub>A</sub> Front ft<sup>2</sup></i>	<i>C<sub>A</sub>A<sub>A</sub> Side ft<sup>2</sup></i>	<i>Weight K</i>
Nokia FASB Antenna w/ mount pipe	A	From Face	3.00 0.00 0.00	0.0000	145.00	No Ice	12.65	15.82	0.24
Nokia FASB Antenna w/ mount pipe	B	From Face	3.00 0.00 0.00	0.0000	145.00	No Ice	12.65	15.82	0.24
Nokia FASB Antenna w/ mount pipe	C	From Face	3.00 0.00 0.00	0.0000	145.00	No Ice	12.65	15.82	0.24
Nokia FASB Antenna w/ mount pipe	A	From Face	3.00 0.00 0.00	0.0000	145.00	No Ice	12.65	15.82	0.24
(4) Nokia FRGB	A	From Face	2.00 0.00 0.00	0.0000	145.00	No Ice	1.39	2.82	0.05
12' Low Profile Platform **	C	None		0.0000	145.00	No Ice	30.00	30.00	1.10
(2) CSS X7CQAP-FRO-845-V w/ mount pipe	A	From Face	3.00 0.00 0.00	0.0000	135.00	No Ice	16.80	11.58	0.10
(2) CSS X7CQAP-FRO-845-V w/ mount pipe	B	From Face	3.00 0.00 0.00	0.0000	135.00	No Ice	16.80	11.58	0.10
(2) CSS X7CQAP-FRO-845-V w/ mount pipe	C	From Face	3.00 0.00 0.00	0.0000	135.00	No Ice	16.80	11.58	0.10
(3) Ericsson RRUS-32 TIA-G 12' Platform w/ Handrail **	C	None		0.0000	135.00	No Ice	3.31	2.42	0.08
KMW ET-X-UW-68-14-65-18 w/ mount pipe	C	None		0.0000	135.00	No Ice	28.00	28.00	2.40
KMW ET-X-UW-68-14-65-18 w/ mount pipe	A	From Face	1.00 0.00 0.00	0.0000	125.00	No Ice	8.39	6.29	0.06
KMW ET-X-UW-68-14-65-18 w/ mount pipe	B	From Face	1.00 0.00 0.00	0.0000	125.00	No Ice	8.39	6.29	0.06
KMW ET-X-UW-68-14-65-18 w/ mount pipe	C	From Face	1.00 0.00 0.00	0.0000	125.00	No Ice	8.39	6.29	0.06
(3) Ericsson RRUS-11	A	From Face	2.00 0.00 0.00	0.0000	125.00	No Ice	2.55	0.92	0.05
(3) Ericsson RRUS 12	B	From Face	2.00 0.00 0.00	0.0000	125.00	No Ice	3.67	1.46	0.06
(3) Ericsson RRUS A2	C	From Face	2.00 0.00 0.00	0.0000	125.00	No Ice	1.87	0.50	0.03
(3) Ericsson RRUS-32	A	From Face	2.00 0.00 0.00	0.0000	125.00	No Ice	3.31	2.42	0.08
(3) Raycap DC6-48-60-18-8F Suppressor	B	From Face	2.00 0.00 0.00	0.0000	125.00	No Ice	1.47	1.47	0.03
Flush Mount	C	None		0.0000	125.00	No Ice	8.15	8.15	0.85

<b>tnxTower</b>  <b>Michael F. Plahovinsak, P.E.</b> 18301 State Route 161 Plain City, OH 43064 Phone: 614-398-6250 FAX: mike@mfpeng.com	<b>Job</b>	150-ft Monopole - MFP #23517-765 r1	<b>Page</b>	3 of 6
	<b>Project</b>	TC11 Ft. Pierce Orange Ave.	<b>Date</b>	10:23:51 12/04/17
	<b>Client</b>	TP-15913	<b>Designed by</b>	Mike

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>AA</sub> Front	C <sub>AA</sub> Side	Weight	
			Horz	Lateral						
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
**										
KMW	A	From Face	1.00	0.0000		115.00	No Ice	8.39	6.29	0.06
ET-X-UW-68-14-65-18 w/ mount pipe			0.00	0.00						
KMW	B	From Face	1.00	0.0000		115.00	No Ice	8.39	6.29	0.06
ET-X-UW-68-14-65-18 w/ mount pipe			0.00	0.00						
KMW	C	From Face	1.00	0.0000		115.00	No Ice	8.39	6.29	0.06
ET-X-UW-68-14-65-18 w/ mount pipe			0.00	0.00						
(3) Ericsson RRUS-11	A	From Face	2.00	0.0000		115.00	No Ice	2.55	0.92	0.05
			0.00	0.00						
(3) Ericsson RRUS 12	B	From Face	2.00	0.0000		115.00	No Ice	3.67	1.46	0.06
			0.00	0.00						
(3) Ericsson RRUS A2	C	From Face	2.00	0.0000		115.00	No Ice	1.87	0.50	0.03
			0.00	0.00						
(3) Ericsson RRUS-32	A	From Face	2.00	0.0000		115.00	No Ice	3.31	2.42	0.08
			0.00	0.00						
(3) Raycap DC6-48-60-18-8F Suppressor	B	From Face	2.00	0.0000		115.00	No Ice	1.47	1.47	0.03
			0.00	0.00						
Flush Mount	C	None		0.0000		115.00	No Ice	8.15	8.15	0.85

### Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice
3	0.9 Dead+1.6 Wind 0 deg - No Ice
4	1.2 Dead+1.6 Wind 90 deg - No Ice
5	0.9 Dead+1.6 Wind 90 deg - No Ice
6	1.2 Dead+1.6 Wind 180 deg - No Ice
7	0.9 Dead+1.6 Wind 180 deg - No Ice
8	Dead+Wind 0 deg - Service
9	Dead+Wind 90 deg - Service
10	Dead+Wind 180 deg - Service

### Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	150 - 125	Pole	Max Tension	8	0.00	-0.00	-0.00
			Max. Compression	1	-7.25	1.35	0.79
			Max. Mx	4	-6.36	-280.44	6.30
			Max. My	2	-6.31	-4.49	289.31
			Max. Vy	4	20.11	-280.44	6.30
			Max. Vx	2	-20.43	-4.49	289.31

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L2	125 - 75	Pole	Max. Torque	2			6.06
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-19.55	18.47	-1686.24
			Max. Mx	4	-19.54	-1682.20	18.84
			Max. My	2	-19.54	-13.81	1691.96
			Max. Vy	4	36.01	-1682.20	18.84
			Max. Vx	2	-35.93	-13.81	1691.96
L3	75 - 43.5	Pole	Max. Torque	4			7.02
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-29.71	25.64	-2858.62
			Max. Mx	4	-29.71	-2857.32	26.02
			Max. My	2	-29.71	-20.70	2864.42
			Max. Vy	4	40.95	-2857.32	26.02
			Max. Vx	2	-40.87	-20.70	2864.42
L4	43.5 - 0	Pole	Max. Torque	4			6.98
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-50.79	36.91	-5087.99
			Max. Mx	4	-50.79	-5091.19	37.30
			Max. My	2	-50.79	-31.90	5093.85
			Max. Vy	4	48.00	-5091.19	37.30
			Max. Vx	2	-47.91	-31.90	5093.85
		Max. Torque	4			6.96	

### Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 125	16.813	8	0.9802	0.0098
L2	125 - 75	11.780	8	0.9107	0.0049
L3	80.5 - 43.5	4.723	8	0.5665	0.0016
L4	50 - 0	1.799	8	0.3314	0.0007

### Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
145.00	Nokia FASB Antenna w/ mount pipe	8	15.781	0.9710	0.0088	46557
135.00	(2) CSS X7CQAP-FRO-845-V w/ mount pipe	8	13.742	0.9479	0.0067	15519
125.00	KMW ET-X-UW-68-14-65-18 w/ mount pipe	8	11.780	0.9107	0.0050	9567
115.00	KMW ET-X-UW-68-14-65-18 w/ mount pipe	8	9.940	0.8527	0.0041	8634

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### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 125	125.731	2	7.3065	0.0715
L2	125 - 75	88.258	2	6.8073	0.0359
L3	80.5 - 43.5	35.478	2	4.2538	0.0117
L4	50 - 0	13.523	2	2.4915	0.0053

### Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
145.00	Nokia FASB Antenna w/ mount pipe	2	118.049	7.2419	0.0671	6572
135.00	(2) CSS X7CQAP-FRO-845-V w/ mount pipe	2	102.873	7.0775	0.0514	2188
125.00	KMW ET-X-UW-68-14-65-18 w/ mount pipe	2	88.258	6.8073	0.0380	1345
115.00	KMW ET-X-UW-68-14-65-18 w/ mount pipe	2	74.529	6.3807	0.0296	1202

### Pole Design Data

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> φP <sub>n</sub>
L1	150 - 125 (1)	TP27.81x22x0.1875	25.00	0.00	0.0	16.4388	-6.31	1076.59	0.006
L2	125 - 75 (2)	TP39.44x27.81x0.3125	50.00	0.00	0.0	37.5407	-19.54	2641.85	0.007
L3	75 - 43.5 (3)	TP46.14x37.5357x0.375	37.00	0.00	0.0	52.6726	-29.71	3737.20	0.008
L4	43.5 - 0 (4)	TP55.5x43.8784x0.4375	50.00	0.00	0.0	76.4612	-50.79	5313.23	0.010

### Pole Bending Design Data

Section No.	Elevation ft	Size	M <sub>ux</sub> kip-ft	φM <sub>ux</sub> kip-ft	Ratio M <sub>ux</sub> φM <sub>ux</sub>	M <sub>uy</sub> kip-ft	φM <sub>uy</sub> kip-ft	Ratio M <sub>uy</sub> φM <sub>uy</sub>
L1	150 - 125 (1)	TP27.81x22x0.1875	289.35	612.16	0.473	0.00	612.16	0.000
L2	125 - 75 (2)	TP39.44x27.81x0.3125	1692.02	2055.30	0.823	0.00	2055.30	0.000
L3	75 - 43.5 (3)	TP46.14x37.5357x0.375	2864.50	3398.77	0.843	0.00	3398.77	0.000
L4	43.5 - 0 (4)	TP55.5x43.8784x0.4375	5093.95	6015.48	0.847	0.00	6015.48	0.000

### Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V <sub>u</sub> K	φV <sub>n</sub> K	Ratio V <sub>u</sub> φV <sub>n</sub>	Actual T <sub>u</sub> kip-ft	φT <sub>n</sub> kip-ft	Ratio T <sub>u</sub> φT <sub>n</sub>
L1	150 - 125 (1)	TP27.81x22x0.1875	20.43	534.98	0.038	6.06	1225.83	0.005
L2	125 - 75 (2)	TP39.44x27.81x0.3125	35.93	1320.92	0.027	6.53	4115.62	0.002
L3	75 - 43.5 (3)	TP46.14x37.5357x0.375	40.87	1868.60	0.022	6.50	6805.84	0.001

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Section No.	Elevation ft	Size	Actual $V_u$ K	$\phi V_n$ K	Ratio $\frac{V_u}{\phi V_n}$	Actual $T_u$ kip-ft	$\phi T_n$ kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L4	43.5 - 0 (4)	TP55.5x43.8784x0.4375	47.91	2656.62	0.018	6.49	12045.67	0.001

### Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	150 - 125 (1)	0.006	0.473	0.000	0.038	0.005	0.480 ✓	1.000	4.8.2 ✓
L2	125 - 75 (2)	0.007	0.823	0.000	0.027	0.002	0.831 ✓	1.000	4.8.2 ✓
L3	75 - 43.5 (3)	0.008	0.843	0.000	0.022	0.001	0.851 ✓	1.000	4.8.2 ✓
L4	43.5 - 0 (4)	0.010	0.847	0.000	0.018	0.001	0.857 ✓	1.000	4.8.2 ✓

### Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow}$ K	% Capacity	Pass Fail
L1	150 - 125	Pole	TP27.81x22x0.1875	1	-6.31	1076.59	48.0	Pass
L2	125 - 75	Pole	TP39.44x27.81x0.3125	2	-19.54	2641.85	83.1	Pass
L3	75 - 43.5	Pole	TP46.14x37.5357x0.375	3	-29.71	3737.20	85.1	Pass
L4	43.5 - 0	Pole	TP55.5x43.8784x0.4375	4	-50.79	5313.23	85.7	Pass
Summary								
Pole (L4)							85.7	Pass
<b>RATING =</b>							<b>85.7</b>	<b>Pass</b>

# Monopole Flange Connection Calculation

ANSI/TIA-222-G-2

<b>Factored Connection Reactions:</b>	<b>Pole Shape:</b>	<b>Bolts:</b>	<b>Flange Plate:</b>
Moment: 289 ft-kips	18-Sided	(8) 1 dia. A325 Bolts	1.25 in. x 37 in. Round
Shear: 20 kips	<b>Pole Dia. (D<sub>p</sub>):</b>	On a 33 in Bolt Circle	f <sub>y</sub> = 50 ksi
Axial: 6 kips	27.81 in		Inner Dia = 25 in

## Bolt Calculation TIA 4.9.6.4 (Combined Shear and Tension)

The following Interaction Equation Shall Be Satisfied:

$$\begin{aligned} \phi &= 0.75 \text{ TIA 4.9.9} \\ I_{\text{bolts}} &= 1089.00 \text{ in}^2 \text{ Momet of Inertia} \\ T_u &= 52.55 \text{ kips Tension Force} \\ P_u &= 53.30 \text{ kips Compressive Force} \\ V_u &= 2.50 \text{ kips Shear Force} \\ \phi R_{nv} &= 28.30 \text{ kips From AISC 7-1} \\ \phi R_{nt} &= 53.00 \text{ kips From AISC 7-2} \end{aligned}$$

$$\left( \frac{V_{ub}}{\phi R_{nv}} \right)^2 + \left( \frac{T_{ub}}{\phi R_{nt}} \right)^2 \leq 1.0$$

$$0.991 < 1.0 \text{ --> OK}$$

## Base Plate Calculation According to TIA-222-G

$$\begin{aligned} \phi &= 0.90 \text{ TIA 4.7} \\ M_{PL} &= 138.24 \text{ in-kip Plate Moment} \\ L &= 10.92 \text{ in Section Length} \\ Z &= 4.27 \text{ Plastic Section Modulus} \\ M_P &= 213.32 \text{ in-kip Plastic Moment} \\ \phi M_n &= 191.9871 \text{ in-kip Factored Resistance} \end{aligned}$$

Calculated Moment vs Factored Resistance

$$138.2351 \text{ in-kip} \leq 192 \text{ in-kip}$$

<b>Bolts Are Adequate</b>	<b>99.1%</b>
<b>Plate is Adequate</b>	<b>72.0%</b>

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	<b>Client</b> TAPP TP-15913	<b>Designed by</b> Mike

## Anchor Rod and Base Plate Calculation

### ANSI/TIA-222-G-2

Factored Base Reactions:	Pole Shape:	Anchor Rods:	Base Plate:
Moment: 5094 ft-kips	18-Sided	(18) 2.25 in. A615 GR. 75	2.5 in. x 69 in. Round
Shear: 48 kips	<b>Pole Dia. (<math>D_f</math>):</b>	Anchor Rods Evenly Spaced	$f_y = 50$ ksi
Axial: 51 kips	55.50 in	On a 63 in Bolt Circle	

### Anchor Rod Calculation According to TIA-222-G section 4.9.9

$\phi =$	0.80 TIA 4.9.9
$I_{bolts} =$	8930.25 in <sup>2</sup> Momet of Inertia
$P_u =$	216 kips Tension Force
$V_u =$	3 kips Shear Force
$R_{nt} =$	325.00 kips Nominal Tensile Strength
$\eta =$	0.50 for detail type (d)

The following Interaction Equation Shall Be Satisfied:

$$\left( \frac{P_u + \frac{V_u}{\eta}}{\phi R_{nt}} \right) \leq 1.0$$

$$0.850 \leq 1$$

### Base Plate Calculation According to TIA-222-G

$\phi =$	0.90 TIA 4.7
$M_{PL} =$	573.4 in-kip Plate Moment
$L =$	9.7 in Section Length
$Z =$	15.1 Plastic Section Modulus
$M_P =$	756.8 in-kip Plastic Moment
$\phi M_n =$	681.1 in-kip Factored Resistance

Calculated Moment vs Factored Resistance

$$573.44 \text{ in-kip} \leq 681 \text{ in-kip}$$

<b>Anchor Rods Are Adequate</b>	<b>85.0%</b> <input checked="" type="checkbox"/>
<b>Base Plate is Adequate</b>	<b>84.2%</b> <input checked="" type="checkbox"/>

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## Caisson Calculation

According to ANSI/TIA-222-G-2

1. Foundation overturning resistance calculated with PLS Caisson, for Brom's method for rigid piles. Soil layers modeled after recommendations from the geotechnical report.
2. Cohesion strength for the upper 21 ft has been reduced by 50%
3. In lieu of a soil resistance factor  $f_s = 0.75$  (TIA-9.4.1) an additional safety factor against soil failure of 1.33 has been applied.
4. Foundation is designed with a minimum safety factor resisting overturning of 2.0
5. Foundation has been designed with factored loads per TIA-222-G.
6. Design water table = 2.5 ft below grade

\*\*\* PIER PROPERTIES      CONCRETE STRENGTH (ksi) = 4.00      STEEL STRENGTH (ksi) = 60.00

DIAMETER (ft) = 7.000      DISTANCE FROM TOP OF PIER TO GROUND LEVEL (ft) = 0.50

*** SOIL PROPERTIES	LAYER	TYPE	THICKNESS (ft)	DEPTH AT TOP OF LAYER (ft)	DENSITY (pcf)	CU (psf)	KP	PHI (degrees)
	1	S	2.50	0.00	100.0		1.000	-0.00
	2	S	1.50	2.50	55.0		1.000	-0.00
	3	S	9.50	4.00	55.0		3.537	34.00
	4	S	5.00	13.50	50.0		2.882	29.00
	5	S	18.50	18.50	50.0		2.881	28.99

\*\*\* DESIGN (FACTORED) LOADS AT TOP OF PIER    MOMENT (ft-k) = 5660.0    VERTICAL (k) = 51.0    SHEAR (k) = 53.0  
 ADDITIONAL SAFETY FACTOR AGAINST SOIL FAILURE = 1.33

\*\*\* CALCULATED PIER LENGTH (ft) = 29.000

\*\*\* CHECK OF SOILS PROPERTIES AND ULTIMATE RESISTING FORCES ALONG PIER

TYPE	TOP OF LAYER BELOW TOP OF PIER (ft)	THICKNESS (ft)	DENSITY (pcf)	CU (psf)	KP	FORCE (k)	ARM (ft)
S	0.50	2.50	100.0		1.000	6.56	2.17
S	3.00	1.50	55.0		1.000	9.17	3.79
S	4.50	9.50	55.0		3.537	418.97	9.95
S	14.00	5.00	50.0		2.882	296.56	16.61
S	19.00	1.16	50.0		2.881	79.87	19.59
S	20.16	8.84	50.0		2.881	-739.92	24.82

\*\*\* SHEAR AND MOMENTS ALONG PIER

DISTANCE BELOW TOP OF PIER (ft)	WITH THE ADDITIONAL SAFETY FACTOR			WITHOUT ADDITIONAL SAFETY FACTOR		
	SHEAR (k)	MOMENT (ft-k)		SHEAR (k)	MOMENT (ft-k)	
0.00	71.2	7657.1		53.4	5742.9	
2.90	65.2	7858.8		48.9	5894.1	
5.80	19.9	8005.5		14.9	6004.1	
8.70	-84.3	7920.5		-63.2	5940.4	
11.60	-222.8	7483.5		-167.1	5612.6	
14.50	-389.7	6596.3		-292.3	4947.2	
17.40	-556.9	5229.8		-417.7	3922.4	
20.30	-730.3	3342.9		-547.7	2507.2	
23.20	-512.3	1534.9		-384.2	1151.2	
26.10	-268.9	396.0		-201.7	297.0	
29.00	-0.0	-0.0		-0.0	-0.0	

\*\*\* TOTAL REINFORCEMENT PCT = 0.72    REINFORCEMENT AREA (in<sup>2</sup>) = 39.90  
 \*\*\* USABLE AXIAL CAP. (k) = 51.0    USABLE MOMENT CAP. (ft-k) = 6005.3

**For Design:**

7-ft Diameter caisson x 32.5-ft long (32-ft Embedded with 0.5-ft above grade)  
 Concrete strength = 4000 PSI @ 28 days. Estimated Concrete Volume = 46 CY3.  
 (34) #10 Vertical Rebar. Steel Cross-Section = 43.18 in<sup>2</sup>

**A2P0227A**  
**Ft Pierce- Orange Ave**  
**Wireless Telecommunication**  
**Facility**

**Radio Frequency (RF) Engineering Report**

Last Updated	11/28/2017
Revision Number	V1.0

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Search Ring Area

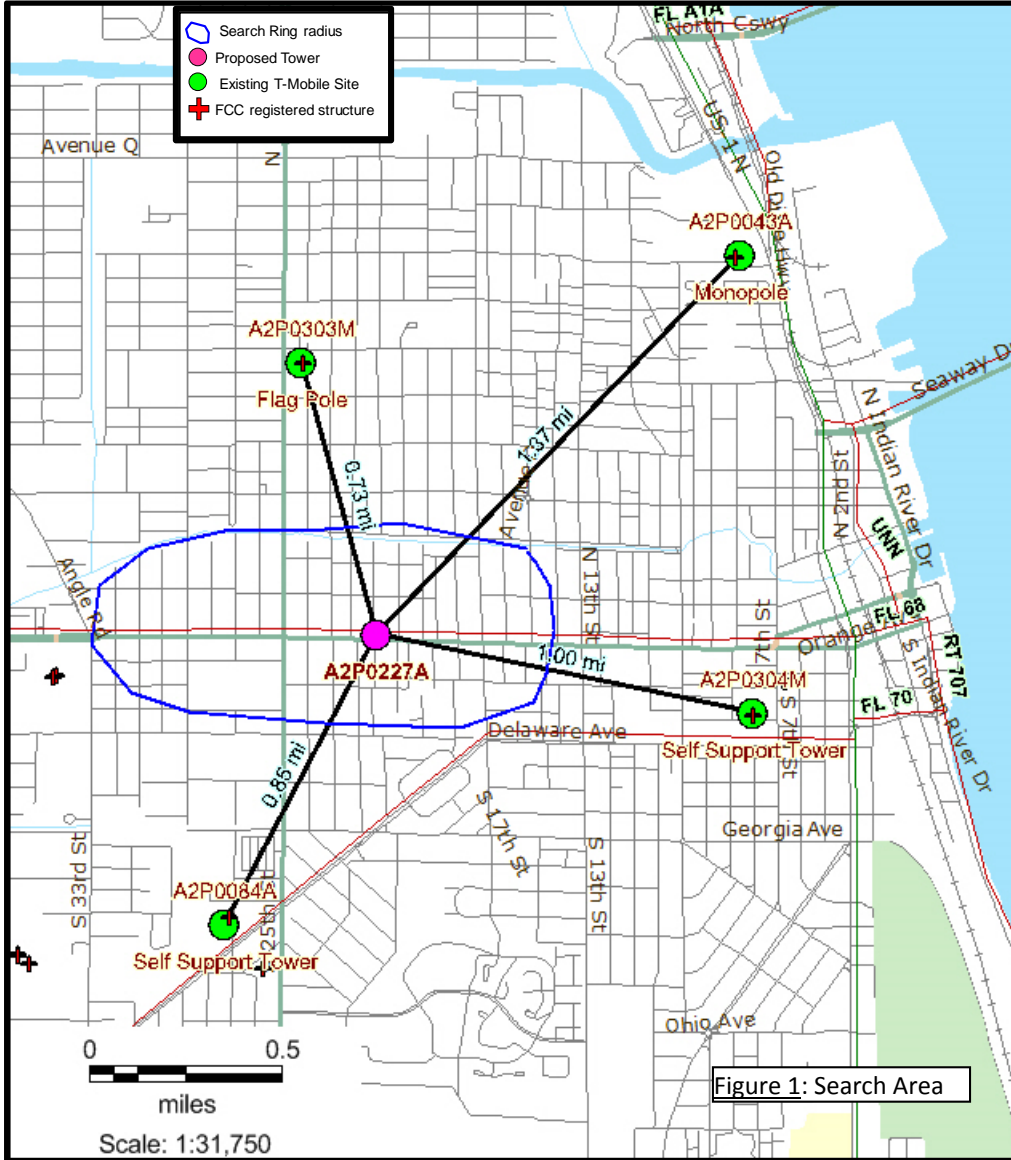


Figure 1: Search Area

As part of T-Mobile’s commitment to improve service in the south Florida market a number of “search rings” have been issued to address coverage deficiencies in the cellular network. Each search ring is in an area where service levels are inadequate to provide the necessary cell phone coverage or capacity. Within the search ring existing towers or structures of sufficient height are sought with the goal of deploying radio transceivers and antennas to improve the local area service levels.

Due to the dramatic increase in cell phone traffic and the popularity of wireless data applications over the last few years, significant demands have been placed on network coverage and capacity. One such area in need of improved services is in the city of Ft Pierce from Canal Terrace in the north to Havana Ave in the south and from S 25th St in the west to 13th St in the east. Coverage levels are too low to support the capacity and coverage needs for this part of the network. Users placing calls indoors and especially during network busy hours may experience dropped calls, ineffective network attempts and slow data application speeds. In the worst-case a user may not be able to place a E911 call.

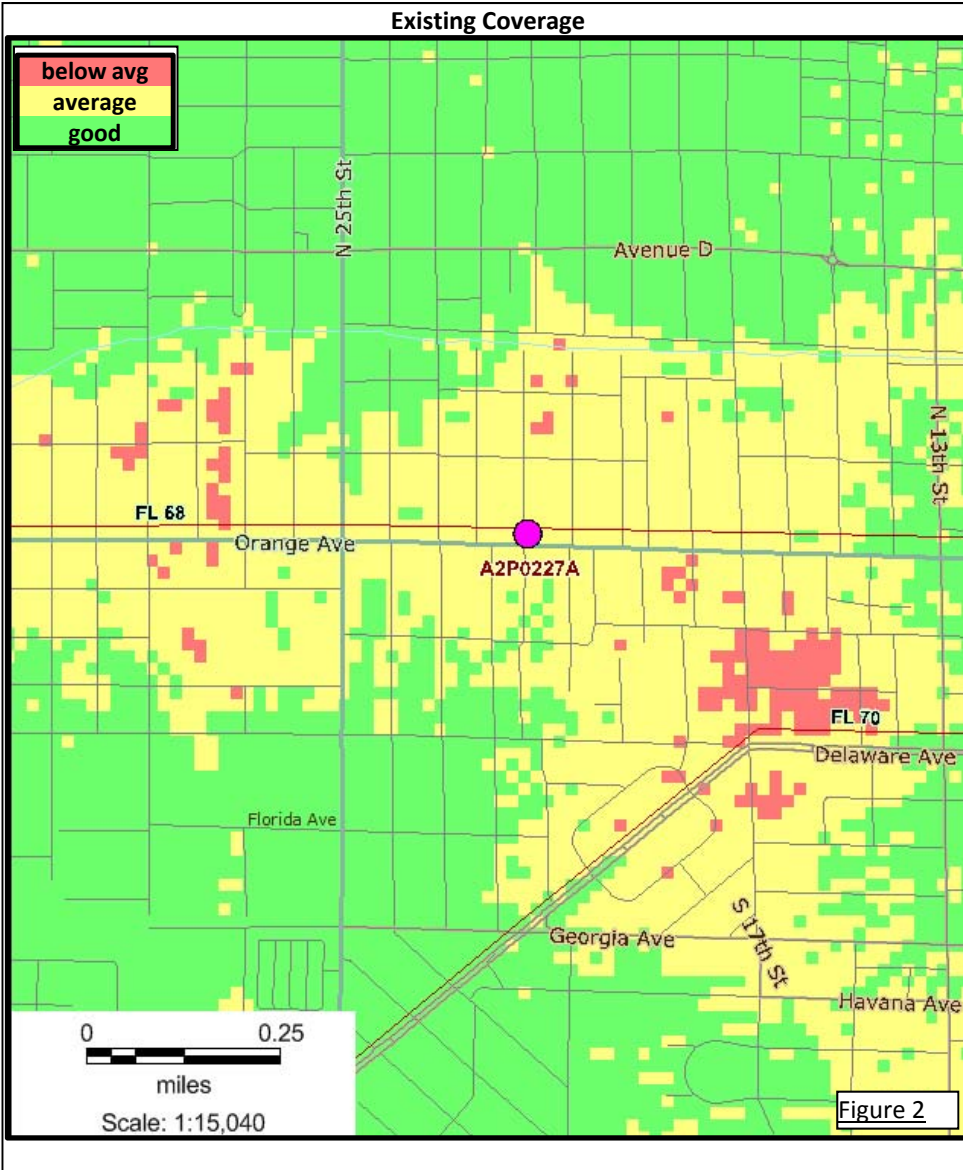
There were no towers or structures of sufficient height within the T-Mobile search area that could accommodate the addition of new facility that would provide an adequate coverage improvement. The surrounding facilities have undergone extensive upgrades over the last decade with no appreciable improvement in service levels in the area of concern.

Shown above in Figure 1 is the T-Mobile search ring and the proposed location surrounded by existing T-Mobile cellular facilities (“cell sites”).

Site_ID	Site_Name	Site_Class_Desc	Antenna Elevation (ft)	Address	City	Distance (mi)
A2P0303M	FT. PIERCE FL1512	Flag Pole	145	910 N. 25th Street	Fort Pierce	0.7
A2P0084A	SBA 27TH STREET	Self Support Tower	140	111 S. 27th Street	Ft. Pierce	0.9
A2P0304M	Crown Citrus Ave	Self Support Tower	120	712 Citrus Ave.	Fort Pierce	1.0
A2P0043A	Crown	Monopole	180	710 Avenue M	Fort Pierce	1.4

**Current Cell Site Coverage and Predicted Improvements**

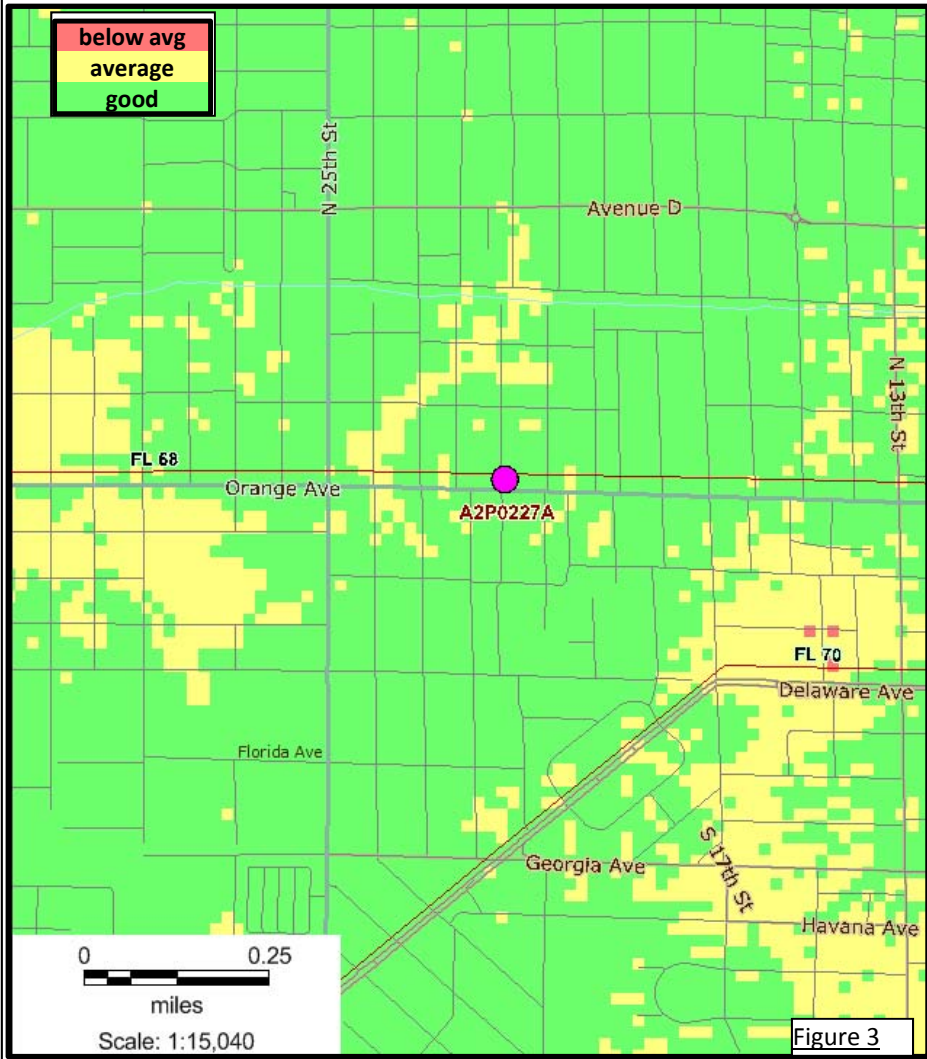
Good (reliable indoor service)	Average (reliable outdoor service)	below average (poor service)
Signal power levels able to support a wide range of wireless services both indoors and outdoors. These services include voice calls and high speed data.	Users may experience call quality issues depending on the signal power levels at their specific location. These issues could include dropped calls, ineffective attempts (blocked calls) or slow data speeds. Service in outdoor locations would be markedly better than indoors in many instances.	A user would encounter call quality issues especially indoors or during network busy hours due to low signal power levels. These issues could include dropped calls, ineffective attempts (blocked calls) and slow data speeds. Service may only be available in outdoor locations. In the worst case a user may not be able to place an emergency (E911) call.



As part of T-Mobile’s design and development process a number of engineering studies are completed to ensure a best-fit approach for cell site additions in the network. Propagation or prediction plots are one of the most important of these and are used extensively to determine if a new proposal is adequate.

In Figure 2 the cell site propagation is shown as shades of color which represent signal power levels that a user would experience at a particular location. The propagation model is based on a predictive computer simulator application that is derived from proprietary methodologies. Green areas indicate signal power levels able to support a wide range of wireless services both indoors and outdoors. These services include voice calls and high speed data. The yellow color indicates areas where a user may experience call quality issues due to inconsistent signal power levels. This may depend on their specific location. For instance, a person may be able to use the cell phone on one side of their house near a window but unable to connect in another part of the house. The red areas represent where a user would encounter call quality issues due to low or unusable signal power levels. This would be especially true indoors or during network busy hours. These issues could include dropped calls, ineffective attempts and slow data speeds. In the worst case a user may not be able to place an emergency (E911) call.

Predicted Coverage with New Facility



The propagation map shown in Figure 3 depicts the predicted signal power levels for the proposed tower when added to the existing network. As can be seen almost all the residential areas have a minimum of average service levels. This is especially important for users who are transitioning from one geographic area to another due to a more consistent coverage overlay. Users indoors will also benefit tremendously due to the closer proximity to the antenna locations. Areas where below average signal power levels still exist can sometimes be alleviated through network optimization methods after the new site comes on line. (These processes are iterative and require a more medium to long term engineering approach)

In summary, T-Mobile has recognized the demand for advanced telecommunication services in these communities. The existing T-Mobile facilities cannot provide these services through upgrade or expansion, due to the distances from the existing tower facilities and cell phone users in this area. Further, no towers or structures of sufficient height were identified in the search ring that could provide the necessary improvements to the network coverage.

These propagation maps graphically demonstrate T-Mobile's business needs based upon existing and predicted customer demands. T-Mobile's goal is to provide reliable wireless service in the areas shown as defined by proprietary QOS (Quality of Service) design parameters.

**Certification Statement of Non-interference**

This letter provides information about the proposed T-Mobile transceiving equipment on the proposed facility at 2006 Orange Ave, Ft Peirce and its potential interference with communication facilities located nearby; as well as the FCC rules governing the human exposure to radio frequency energy (OET 65 guidelines). T-Mobile shall comply with all FCC rules regarding interference to other radio services and T-Mobile shall comply with all FCC rules regarding human exposure to radio frequency energy. The proposed tower facilities, and reception and transmission functions will not interfere with the visual and customary transmission or reception of radio, television or similar services as well as other wireless services enjoyed by surrounding properties.

T-Mobile radio signals are transmitted on exclusively assigned channels within the E, F and C bands in the PCS spectrum and the D, E, F1 and F2 in the AWS spectrum and A Band in 700MHz. In the future AWS-3 Block H and B, C and D blocks in 600 MHz will be active. The Federal Communication Commission (FCC) has allocated these frequencies exclusively for use by cellular service providers. Each cellular service provider is assigned specific frequencies (channels) on which to transmit and receive radio signals.

Cellular transmitters must be type-accepted by the FCC to ensure compliance with technical standards that limit the frequencies, output power, radio frequency emissions, spurious radio noise and other technical parameters. Cellular licensees like T-Mobile owns are required to use type-accepted equipment. The assignment of frequencies and FCC rules keep cellular radio signals from interfering with or being interfered with by other radio transmissions and provide guidelines outlining the limits for permissible human RF exposure. In the event of a complaint of interference or other concerns about cellular antenna facilities, the FCC has a resolution process to determine the source of interference and whether a facility is in compliance with FCC rules.

In the event of interference or other known issues with the transmission facility contact with the T-Mobile Network Operations Center (NOC) can be established 24 hours a day, 7 days a week 365/366 days per year at the following numbers: (877) 611-5868 (DAY), (877) 611-5868 (NIGHT)

Name Patrick Keane

Title T-Mobile RF Engineer



Signature \_\_\_\_\_

7017 0190 0000 0262 7657

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**BOCA RATON, FL 33431**

**OFFICIAL USE**

Certified Mail Fee	\$3.35	
\$		0420
Extra Services & Fees (check box, add fee as appropriate)	\$0.00	16
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.49	
\$		Postmark Here
Total Postage and Fees	\$3.84	OCT 19 2017
\$		10/19/2017

Sent To: **Mark Baesch**  
 Street and Apt. No., or PO Box No.: **4700 Exchange Ct Ste 100**  
 City, State, ZIP+4®: **Boca Raton FL 33431**

PS Form 3800, April 2015 PSN 7530-02-000-9047. See Reverse for Instructions

7017 0190 0000 0262 7671

**U.S. Postal Service™**  
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**FORT LAUDERDALE, FL 33309**

**OFFICIAL USE**

Certified Mail Fee	\$3.35	
\$		0420
Extra Services & Fees (check box, add fee as appropriate)	\$0.00	16
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.49	
\$		Postmark Here
Total Postage and Fees	\$3.84	OCT 19 2017
\$		10/19/2017

Sent To: **Matt Spiak**  
 Street and Apt. No., or PO Box No.: **6700 N Andrews Ave Ste 700**  
 City, State, ZIP+4®: **Fort Lauderdale FL 33309**

PS Form 3800, April 2015 PSN 7530-02-000-9047. See Reverse for Instructions

7017 0190 0000 0262 7640

**U.S. Postal Service™**  
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**LAKE MARY, FL 32746**

**OFFICIAL USE**

Certified Mail Fee	\$3.35	
\$		0420
Extra Services & Fees (check box, add fee as appropriate)	\$0.00	16
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.49	
\$		Postmark Here
Total Postage and Fees	\$3.84	OCT 19 2017
\$		10/19/2017

Sent To: **Connie Chapman**  
 Street and Apt. No., or PO Box No.: **3210 Lake Emma Rd**  
 City, State, ZIP+4®: **Lake Mary FL 32746**

PS Form 3800, April 2015 PSN 7530-02-000-9047. See Reverse for Instructions



RG Towers, LLC

10/20/17

RE: RG Towers-Ft Pierce- Orange Ave Lighting Plan- Section 22-58-D.8

There is no proposed lighting at the proposed development and hence section 22.58.D.8 below is not applicable

(8)

A lighting plan which shows illumination of all interior and immediately adjoining streets as follows:

a.

At least one (1) average footcandle for streets classified as collector classified as collector, arterial or higher;

b.

At least five-tenths average footcandle for streets other than as described in the immediately foregoing subsection;

c.

At least one (1) average footcandle for specially designated pedestrian walkways.

The uniformity ratio for lighting required by this section shall be an average/minimum ratio of ten (10) to one (1). There shall be included with the lighting plan a statement of a registered engineer or architect showing calculations demonstrating compliance with this section to the city engineer and such statement shall be subject to the city engineers approval. Subsequently a certificate of occupancy may not be issued until there is filed with the director a certificate from a registered engineer or architect of design that the lighting installation meets the requirements of this section.

Sincerely,

Holly Valdez  
V.P. Operations  
RG Towers, LLC



RG Towers, LLC

10/20/17

RE: RG Towers-FT Pierce Orange Ave Beach Dune Protection Plan- Section 22-58-D.7

The proposed development is greater than three miles to the beach and hence section 22.58.D.7 below is not applicable

(7)

*A plan providing, where applicable, for the protection of the beach and dune system. The plan shall include these requirements:*

*a.*

*Demonstration of compliance with the coastal construction control line established pursuant to Chapter 161, Florida Statutes;*

*b.*

*All beach access points are to be provided as beach/dune walkovers in accordance with the requirements of the Florida Department of Natural Resources;*

*c.*

*No construction which threatens the stability of the primary dune or beach itself shall be permitted;*

*d.*

*No rigid shore protection structures shall be permitted except when used as part of a comprehensive plan for beach restoration and when nonstructural alternatives are unavailable;*

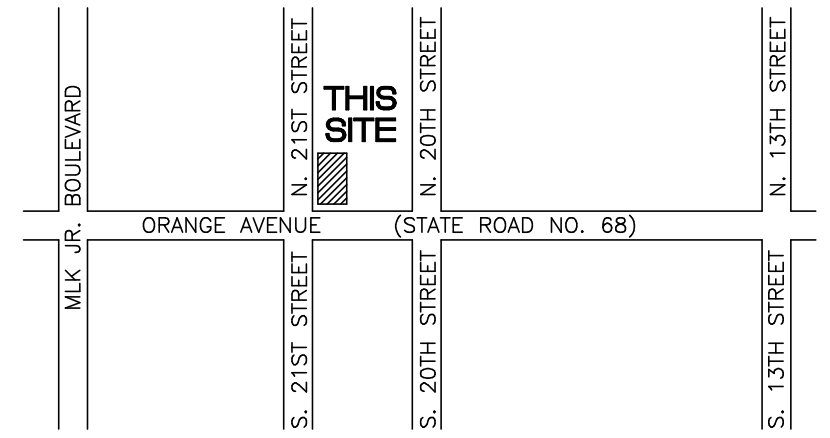
*e.*

*Demonstration of dune restoration measures conforming to the requirements of the Florida Department of Natural Resources.*

Sincerely,

Holly Valdez  
V.P. Operations  
RG Towers, LLC

**ORANGE AVENUE**



**LOCATION SKETCH**  
SECTION 09-1555-140E  
NOT TO SCALE

**150' MONOPOLE PROPOSED TOWER INFORMATION**

LATITUDE = 27°26'51.584" NORTH  
LONGITUDE = 080°20'45.150" WEST  
NORTH AMERICAN DATUM OF 1983/2011 NAD 83/2011)  
EXISTING AVERAGE GROUND ELEVATION AT TOWER = 19.8 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

**DESCRIPTION OF RG TOWERS LEASE PARCEL**

A PARCEL OF LAND BEING A PORTION OF LOT 5, BLOCK 3, FLORIANA PARK, AS RECORDED IN PLAT BOOK 2, PAGE 7C OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID LOT 5, BLOCK 3;

THENCE ON A GRID BEARING OF S88°19'00"E ALONG THE NORTH LINE OF LOT 5, BLOCK 3, A DISTANCE OF 19.52 FEET;

THENCE S01°41'00"W A DISTANCE OF 15.00 FEET TO A POINT ON A LINE 15.00 FEET SOUTH OF AND PARALLEL WITH THE NORTH LINE OF SAID LOT 5, BLOCK 3, SAID POINT ALSO BEING THE POINT OF BEGINNING;

THENCE S88°19'00"E ALONG SAID PARALLEL LINE, A DISTANCE OF 25.01 FEET;

THENCE S00°16'00"E A DISTANCE OF 79.98 FEET TO A POINT ON A LINE 25.00 FEET NORTH OF AND PARALLEL WITH THE NORTH RIGHT-OF-WAY LINE OF ORANGE AVENUE (80 FOOT PUBLIC RIGHT-OF-WAY);

THENCE N88°19'00"W ALONG SAID PARALLEL LINE, A DISTANCE OF 25.01 FEET TO A POINT ON A LINE 19.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SAID LOT 5, BLOCK 3;

THENCE N00°16'00"W ALONG SAID PARALLEL LINE, A DISTANCE OF 79.98 FEET TO THE POINT OF BEGINNING;

SAID PARCEL OF LAND SITUATE WITHIN ST. LUCIE COUNTY, FLORIDA CONTAINING 1,999.47 SQUARE FEET MORE OR LESS.

**DESCRIPTION OF NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT**

A PARCEL OF LAND BEING A PORTION OF LOT 5, BLOCK 3, FLORIANA PARK, AS RECORDED IN PLAT BOOK 2, PAGE 7C OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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THENCE N00°16'00"W ALONG SAID PARALLEL LINE, A DISTANCE OF 29.99 FEET TO THE POINT OF BEGINNING;

THENCE S89°44'00"W A DISTANCE OF 19.00 FEET TO A POINT ON THE WEST LINE OF SAID LOT 5, BLOCK 3, SAID POINT ALSO BEING ON THE EAST RIGHT-OF-WAY LINE OF NORTH 21ST STREET (60 FOOT PUBLIC RIGHT-OF-WAY);

THENCE N00°16'00"W ALONG SAID WEST LINE AND EAST RIGHT-OF-WAY LINE, A DISTANCE OF 20.00 FEET;

THENCE N89°44'00"E A DISTANCE OF 19.00 FEET;

THENCE S00°16'00"E A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING;

SAID PARCEL OF LAND SITUATE WITHIN ST. LUCIE COUNTY, FLORIDA CONTAINING 380.00 SQUARE FEET MORE OR LESS.

**REVIEW OF TITLE SEARCH REPORT**

I HAVE REVIEWED THE REPORT OF TITLE PREPARED BY U.S. TITLE SOLUTIONS, DATED OCTOBER 14, 2017, FILE NO. 58394-FL1710-5030, AND FIND AS FOLLOWS WITH RESPECT TO MATTERS OF RECORDS LISTED IN SAID REPORT.

1. TAXES, TAX LIENS, TAX SALES, WATER RATES, SEWER AND ASSESSMENTS SET FORTH IN SCHEDULE HEREIN.
2. MORTGAGES RETURNED HEREIN. (-3-). SEE SEPARATE MORTGAGE SCHEDULE.
3. ANY STATE OF FACTS WHICH AN ACCURATE SURVEY MIGHT SHOW OR SURVEY EXCEPTIONS SET FORTH HEREIN.
4. RIGHTS OF TENANTS OR PERSON IN POSSESSION.

(JUDGMENTS, LIENS AND UCC)  
5. NONE WITHIN PERIOD SEARCHED

(COVENANTS/RESTRICTIONS)  
6. NONE WITHIN PERIOD SEARCHED

(EASEMENTS AND RIGHTS OF WAY)  
7. NONE WITHIN PERIOD SEARCHED

(OTHER FILED DOCUMENTS)  
8. PLAT OF FORT PIERCE FARMS IN BOOK 2, PAGE 7-A.

- PARENT TRACT DOES NOT LIE WITHIN SAID PLAT.

9. PLAT OF OAKLAND PARK IN BOOK 2, PAGE 7-B.

- PARENT TRACT DOES NOT LIE WITHIN SAID PLAT.

10. PLAT OF FLORIANA PARK IN BOOK 2, PAGE 7-C.

- BLANKET IN NATURE - PARENT TRACT LIES COMPLETELY WITHIN SAID PLAT.

- THERE ARE NO EASEMENTS, RESTRICTIONS AND / OR SETBACKS DEPICTED ON SAID PLAT, NOTHING TO PLOT.

11. CERTIFICATION OF TRUST BETWEEN JOHN C. WALKER TRUST DATED JULY 26, 1994 AND JOHN C. WALKER, TRUSTEE OF THE JOHN C. WALKER TRUST DATED JULY 26, 1994 DATED 12/24/2015 RECORDED 12/31/2015 IN BOOK 3822, PAGE 1764.

- BLANKET IN NATURE - DESCRIBES PARENT TRACT.  
- SAID TRUST IS NO LONGER THE OWNER OF THE PARENT TRACT.

12. MEMORANDUM OF WIRELESS COMMUNICATIONS FACILITY LEASE BETWEEN LESLEY PHILLIPS & ABDEL JEDBAR ELBAKARRI, A MARRIED COUPLE AND RG TOWERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY DATED 9/27/2017 RECORDED 10/2/2017 IN BOOK 4047, PAGE 36.

- BLANKET IN NATURE - DESCRIBES PARENT TRACT.

SEE SHEET 1 OF 2 FOR DETAIL OF  
RG TOWERS LEASE PARCEL  
NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT

FLOOD ZONE INFORMATION					
COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	FIRM ZONE	BASE FLOOD ELEVATION
120286	0178	J	02/16/2012	X	N/A

SURVEY DATE:	10/10/2017				
DRAWN:	WSP				
CHECKED:	WSP				
MANAGER:	WSP				
DWG FILE:	17-1404.DWG	No.	DATE	REVISION	BY

**WSP Consultants, Inc.**  
**SURVEYORS & MAPPERS**  
18815 ANNELIS DRIVE, LUTZ, FL 33548  
PHONE (813) 909-2420  
PROFESSIONAL SURVEYING & MAPPING CERTIFICATE OF AUTHORIZATION:  
LB 7188, STATE OF FLORIDA

MAP OF BOUNDARY AND TOPOGRAPHIC SURVEY  
ORANGE AVENUE  
PREPARED FOR:  
**RG Towers, LLC**  
LOCATED IN:  
ST. LUCIE COUNTY, FLORIDA

PROJECT NO:  
**17-1404**  
SHEET NO:  
**2 OF 2**

**ORANGE AVENUE**

**PARENT TRACT**

(PER OFFICIAL RECORD BOOK 3822, PAGE 1761 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA)

LOTS 3, 4 AND 5, LESS THE SOUTH 15 FEET THEREOF, BLOCK 3 OF FLORIANA PARK, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE 7C, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

**RG TOWERS LEASE PARCEL**

A PARCEL OF LAND BEING A PORTION OF LOT 5, BLOCK 3, FLORIANA PARK, AS RECORDED IN PLAT BOOK 2, PAGE 7C OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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**NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT**

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SAID PARCEL OF LAND SITUATE WITHIN ST. LUCIE COUNTY, FLORIDA CONTAINING 380.00 SQUARE FEET MORE OR LESS.



Ft Pierce Planning and Zoning  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

12/12/17

**RE: RG Towers - Ft Pierce- Orange Ave** Design Review Application Checklist- Section i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.

Please allow the photograph below to represent the signage proposed for our proposed new communication tower to be located at 2006 Orange Ave.



Please let me know if you have any questions.

Sincerely

Holly Valdez  
V.P. Operations  
RG Towers LLC



RG Towers, LLC

Ft Pierce Planning and Zoning  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

12-12-17

**RE: RG Towers - Ft Pierce Orange Ave Design Review Section 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.**





Please let me know if you have any questions.

Sincerely,

*Holly Valdez*

Holly Valdez  
RG Towers, LLC  
V.P. Operations

2141 Alternate A1A South, Suite 440  
Jupiter, FL 33477  
Phone: 561-748-0302 Fax: 561-748-0303 Web: [www.rgtowers.com](http://www.rgtowers.com)

Ft Pierce Planning and Zoning  
 100 N. U.S. Highway 1  
 Fort Pierce, FL 34950

**RE: RG Towers - Ft Pierce- Orange Ave** Design Review Application Checklist- Section e.

Please allow the photographs below to serve as a precedent for the proposed building design of the new proposed communication tower to be located at Orange Ave. These are all local towers within two miles of the proposed area of development.

<b>Str Reg #</b>	<b>Tower Owner</b>	<b>Distance</b>	<b>Type</b>	<b>Colocations</b>	<b>Height</b>	<b>Address</b>
<b>1270020</b>	American Towers, LLC.	0.79	flagpole	flagpole	150ft	Fl1512 Ft. Pierce - 910 N 25th St Structure City: Fort Pierce, FL
<b>1028726</b>	BellSouth Telecommunications, LLC	1.03	rooftop	rooftop	141ft	712 Citrus Ave Structure City: Fort Pierce, FL
<b>1027499</b>	FLORIDA POWER & LIGHT COMPANY	0.86	guyed	3	300ft	South 33rd Street At Hwy 68 Structure City: Fort Pierce, FL
<b>1227259</b>	Crown Communication LLC	1.43	monopole	3	191ft	710 Ave "m Structure City: Fort Pierce, FL
<b>1036166</b>	SBA Properties, LLC	0.77	SST	2 or 3	350ft	St. Lucie County Structure City: Ft. Pierce, FL
<b>1203992</b>	Daves Communications Inc	0.9	granted	granted	161ft	2530 Okeechobee Rd Structure City: Ft. Pierce, FL
<b>1257640</b>	American Towers, LLC	1.18	unipole	unipole	205ft	37th Street (#75126-shielded) Structure City: Ft. Pierce, FL
<b>1035334</b>	r INDIAN RIVER STATE COLLEGE	1.85	SST	2	500	3209 Virginia Avenue Structure City: Ft. Pierce, FL

1270020



1028726



1027499



1227259



1036166



1203992



1257640



1035334



RG Towers, LLC built a monopole tower located at 2551 Jenkins Rd, Ft Pierce FL 34947 in 2016. We are seeking to develop the same here at 2006 Orange Ave.

**1297991**



Please let me know if you have any questions.

Sincerely

Holly Valdez  
V.P. Operations  
RG Towers LLC



**RG Towers, LLC**

Ft Pierce Planning and Zoning  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

12-12-17

**RE: RG Towers - Ft Pierce Orange Ave Design Review Section D Context photographs of neighboring uses and architectural styles.**





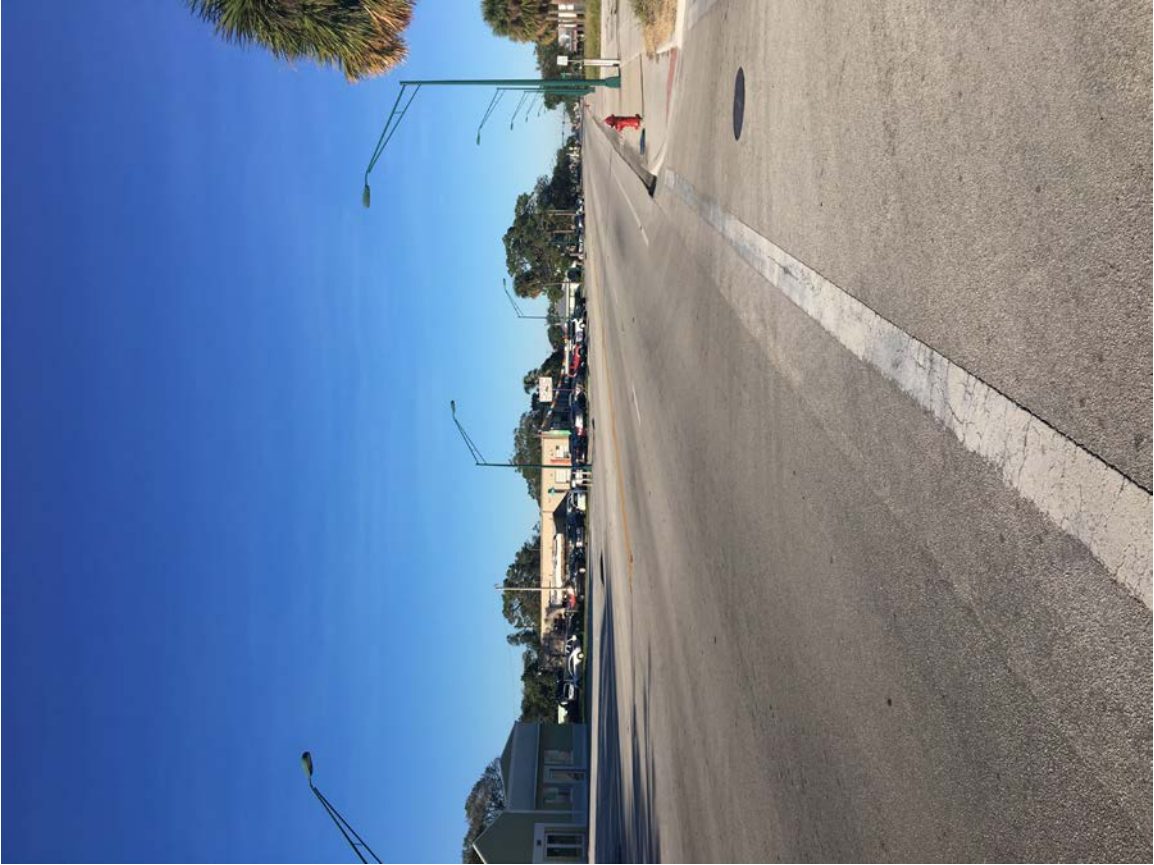
2141 Alternate A1A South, Suite 440  
Jupiter, FL 33477  
Phone: 561-748-0302 Fax: 561-748-0303 Web: [www.rgtowers.com](http://www.rgtowers.com)



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Please let me know if you have any questions.

Sincerely,

Holly Valdez  
RG Towers, LLC  
V.P. Operations

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Phone: 561-748-0302 Fax: 561-748-0303 Web: [www.rgtowers.com](http://www.rgtowers.com)



**RG Towers, LLC**

Ft Pierce Planning and Zoning  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

12-12-17

**RE: RG Towers - Ft Pierce Orange Ave Design Review Section 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.

Coverage levels in this area are too low to support the capacity and coverage needs for this part of T-Mobile’s network. Users placing calls indoors and especially during network busy hours may experience dropped calls, ineffective network attempts and slow data application speeds. In the worst-case a user may not be able to place a E911 call. For this reason RG Towers, LLC is applying for approval to build a 150’ communications tower at the location shown below.

Tower Height/Type                      150’ Monopole  
Address                                      2006 Orange Ave, Ft Pierce FL 34950  
Coordinates                                Approximately 27.447636, -80.345960

The parcel is currently owned by Lesley Phillips and Abdel Jebbar Elbakkari. RG Towers, LLC entered into a Lease Agreement dated 9/27/17.

The character of this undeveloped parcel is commercial with no existing vegetation in the proposed lease area and is among primarily commercial zones as seen in the attached photographs. The surrounding zones are as follows;

<u>ADJACENT ZONING CLASSIFICATIONS</u>	<u>ZONING/LAND USE CLASSIFICATION</u>
ZONING TO EAST	C-3/GENERAL COMMERCIAL
ZONING TO SOUTH	C-3/GENERAL COMMERCIAL
ZONING TO WEST	C-3/GENERAL COMMERCIAL
ZONING TO NORTH	R3/SINGLE FAMILY MODERATE DENSITY

The intended use will be the development of a 150’ monopole communication tower with a 6’ wooden fenced compound to enclose the auxiliary equipment. The fenced compound will be

landscaped per the code to include 7 live oaks and 69 podocarpus. In addition to the fencing and landscaping, RG Towers will install a concrete apron access off N. 21<sup>st</sup> Street and install a 5' sidewalk per the City of Ft Pierce standards.

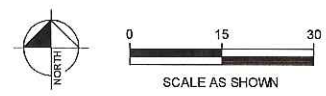
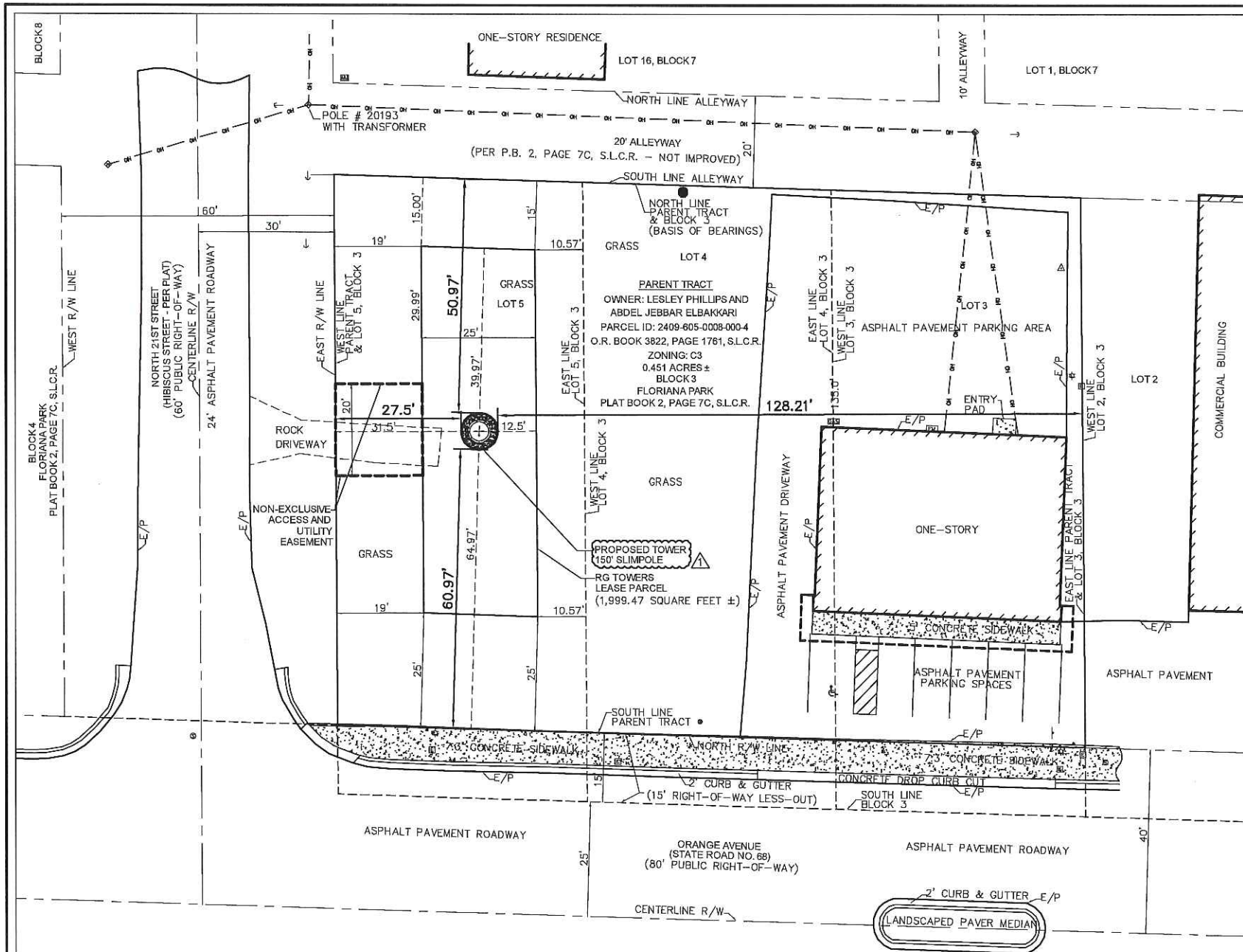
This is to be an unmanned facility with only semiannual visits for maintenance outside of initial construction.



Please let me know if you have any questions.

Sincerely,

Holly Valdez  
RG Towers, LLC  
V.P. Operations



OVERALL SITE PLAN

ADJACENT ZONING CLASSIFICATIONS	ZONING/LAND USE CLASSIFICATION
ZONING TO EAST	C-3/GENERAL COMMERCIAL
ZONING TO SOUTH	C-3/GENERAL COMMERCIAL
ZONING TO WEST	C-3/GENERAL COMMERCIAL
ZONING TO NORTH	R3/SINGLE FAMILY MODERATE DENSITY

STRUCTURE	SETBACKS TO PROPERTY LINE			
	NORTH PROPERTY LINE (FT)	SOUTH PROPERTY LINE (FT)	EAST PROPERTY LINE (FT)	WEST PROPERTY LINE (FT)
TOWER (EDGE)	50.97	60.97	128.21	27.5

**PROJECT DESCRIPTION**

THIS PROJECT IS FOR THE CONSTRUCTION OF AN UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF THE INSTALLATION OF A (150' SLIMPOLE) COMMUNICATIONS TOWER AND FUTURE WIRELESS BASE STATION EQUIPMENT IN ORDER TO PROVIDE RADIO TRANSMISSION SERVICES FOR PERSONAL COMMUNICATIONS AS WELL AS EMERGENCY 911 SERVICE. PROJECT SIZE IS 1,999.47 SF COMPOUND.

COORDINATES: (CENTER OF 150' SLIMPOLE)  $\Delta$   
 LAT: 27°26'51.584" N (NAD 83/2011)  
 LONG: 80°20'45.150" W (NAD 83/2011)  
 ELEVATION: 19.8± NAVD 88 (PER SURVEY)  
 FOLIO NUMBER: 2409-605-0008-000-4

**PROJECT APPLICANT**

RG TOWERS, LLC  
 2141 ALTERNATE A1A SOUTH, SUITE 440  
 JUPITER, FL 33477  
 561-748-0302 ATTN: SCOTT RICHARDS

**PROPERTY OWNER**

LESLEY PHILLIPS  
 ABDEL JEBBAR ELBAKKARI  
 2006 ORANGE AVE  
 FORT PIERCE, FL 34950

**UTILITIES**

THIS PROJECT WILL REQUIRE POWER AND TELEPHONE SERVICE ONLY, NO WET UTILITIES OR GARBAGE COLLECTION WILL BE NEEDED TO SUPPORT THIS PROJECT

**HANDICAP ACCESS**

THIS FACILITIES IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS IS NOT REQUIRED

**IMPERVIOUS COVERAGE**

PROPOSED IMPERVIOUS SURFACE COVERAGE IS EQUAL TO FUTURE BUILDING (EQUIPMENT SLABS) AND TOWER FOOTPRINTS (650 SF MAX)

**PROJECT DENSITY**

THERE ARE NO RESIDENTIAL UNITS FOR THIS PROJECT. PROJECT DENSITY IS N/A.

**DRAINAGE REQUIREMENTS**

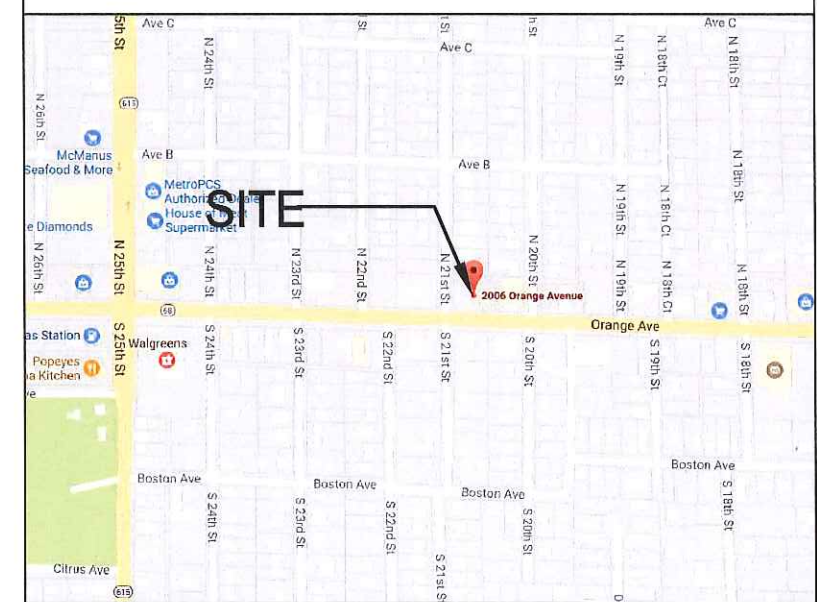
THE FIRST 1" OF STORMWATER RUNOFF IS TO BE RETAINED ON SITE PRIOR TO DISCHARGE TO THE OVERALL MASTER DRAINAGE SYSTEM FOR THE PARENT TRACT.

**LANDSCAPING REQUIREMENTS**

PERIMETER LANDSCAPING AROUND COMPOUND TO BE IN COMPLIANCE WITH CITY OF FORT PIERCE CODE

**NOTES:**

- FCC REQUIRES SIGNS TO BE PROVIDED AND INSTALLED AS NECESSARY.
- "HIGH VOLTAGE-DANGER" SIGN INSTALLED ON GATE AND SIGN SHALL NOT EXCEED 1 SF IN AREA.
- 6' HIGH WOOD FENCE AND LOCKED ENTRY GATE.



LOCATION MAP

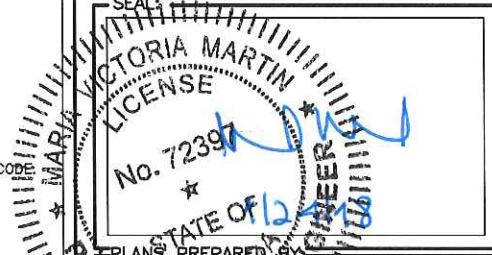
RG Towers, LLC  
 2141 Alternate A1A South, Suite 440  
 Jupiter, FL 33477

PROJECT INFORMATION:  
 FT PIERCE-ORANGE AVE  
 2006 ORANGE AVE  
 FORT PIERCE, FL 34950  
 ST LUCIE COUNTY

CURRENT ISSUE DATE:  
 NOVEMBER 2017

ISSUED FOR:  
 SITE PLAN REVIEW

REV.:	DATE:	DESCRIPTION:
$\Delta$	01-22-18	PER CITY COMMENTS



PLANS PREPARED BY:  
**Kimley-Horn**  
 HORN AND ASSOCIATES, INC.  
 1920 WEKIVA WAY, SUITE 200  
 WEST PALM BEACH, FLORIDA 33411  
 (561) 845-0665  
 FBPE CA00006956

PROVIDER:  
 DRAWN BY: CHK. APV.  
 MM LF MM

LICENSURE:  
 MARIA VICTORIA MARTIN PE 72397

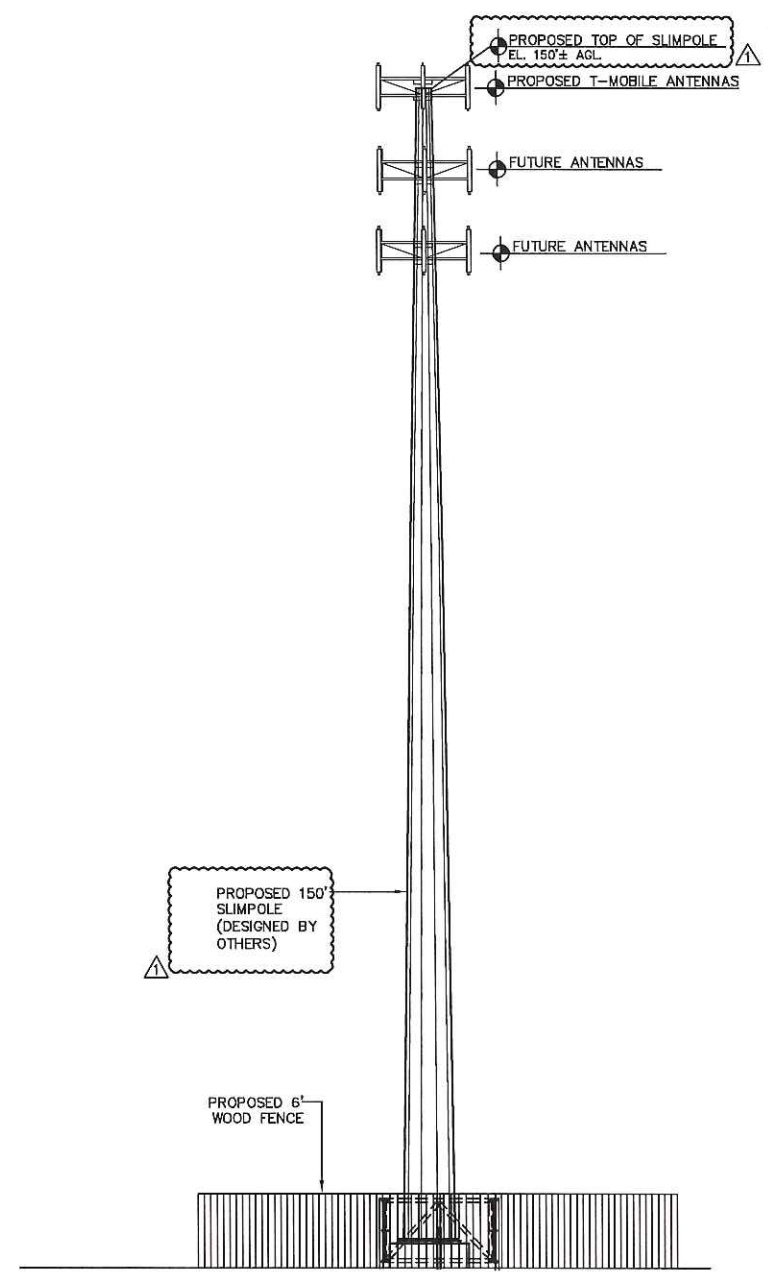
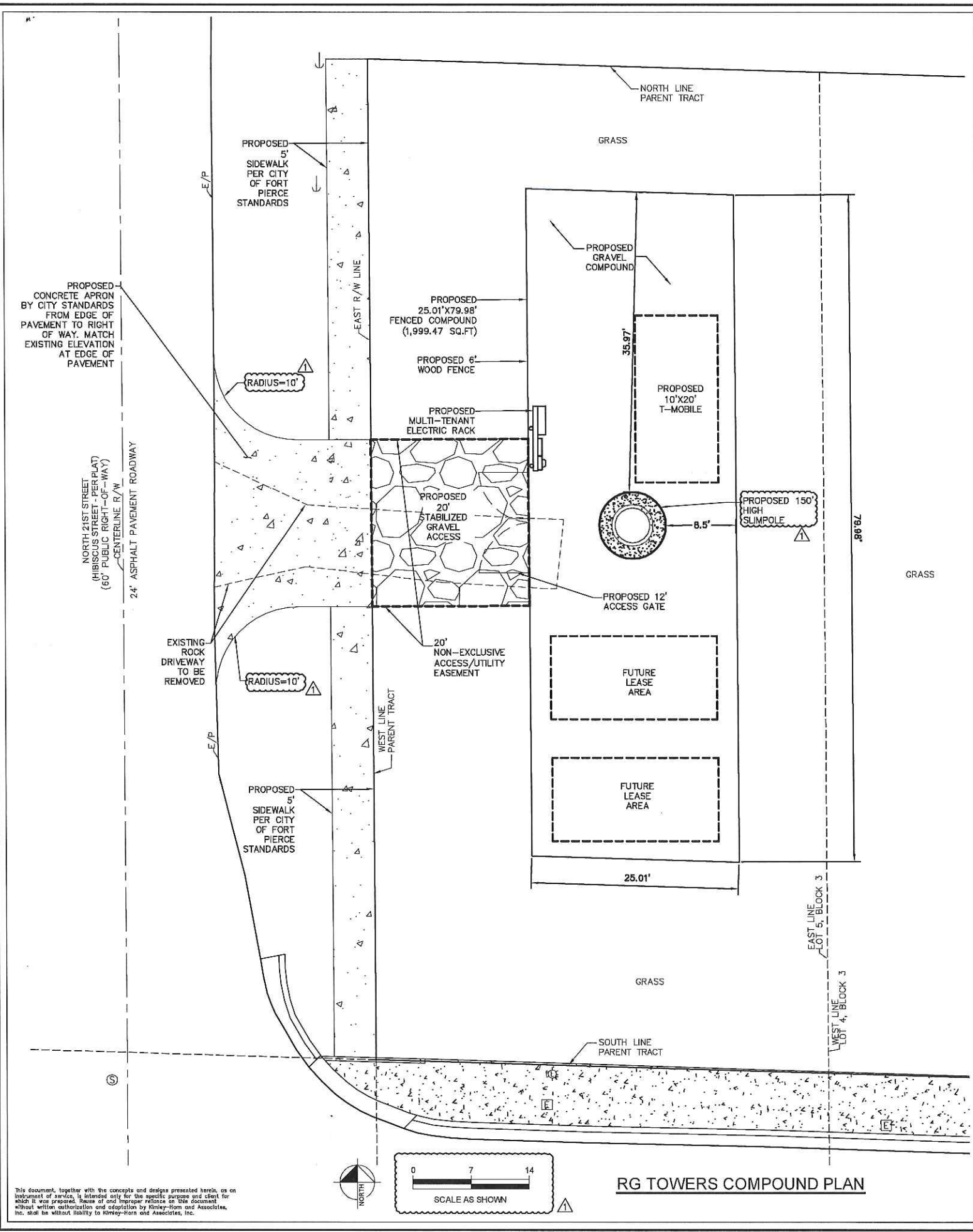
SHEET TITLE:  
 SITE PLAN

SHEET NUMBER: 1/5 REVISION:

KHA Job #: 144042047

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FLOOD ZONE INFORMATION					
COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	FIRM ZONE	BASE FLOOD ELEVATION
120286	0178	J	02/16/2012	X	N/A



- NOTE:**
1. ALL PROPOSED ATTACHMENTS TO TOWER BASED ON STRUCTURAL ANALYSIS BY OTHERS.
  2. TOWER IS DESIGNED FOR A TOTAL OF THREE WIRELESS SERVICE PROVIDERS. LOCATION OF FUTURE PROVIDERS IS APPROXIMATE.
  3. CONTRACTOR TO COORDINATE ANTENNA MOUNTS W/ OWNER.
  4. CONTRACTOR TO REFER TO STRUCTURAL ANALYSIS (BY OTHERS).

**RG Towers, LLC**  
2141 Alternate A1A South, Suite 440  
Jupiter, FL 33477

**PROJECT INFORMATION:**

**FT PIERCE-ORANGE AVE**  
2006 ORANGE AVE  
FORT PIERCE, FL 34950  
ST LUCIE COUNTY

**CURRENT ISSUE DATE:**  
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FBPE CA00000996

**PROVIDER:**

**DRAWN BY:** MM    **CHK.:** LF    **APV.:** MM

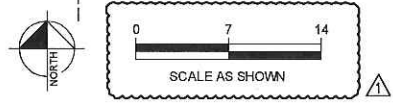
**LICENSURE:**  
MARIA VICTORIA MARTIN    PE 72397

**SHEET TITLE:**  
RG TOWERS COMPOUND  
PLAN & TOWER ELEVATION

**SHEET NUMBER:** 2/5    **REVISION:**

**KHA Job #:** 144042047

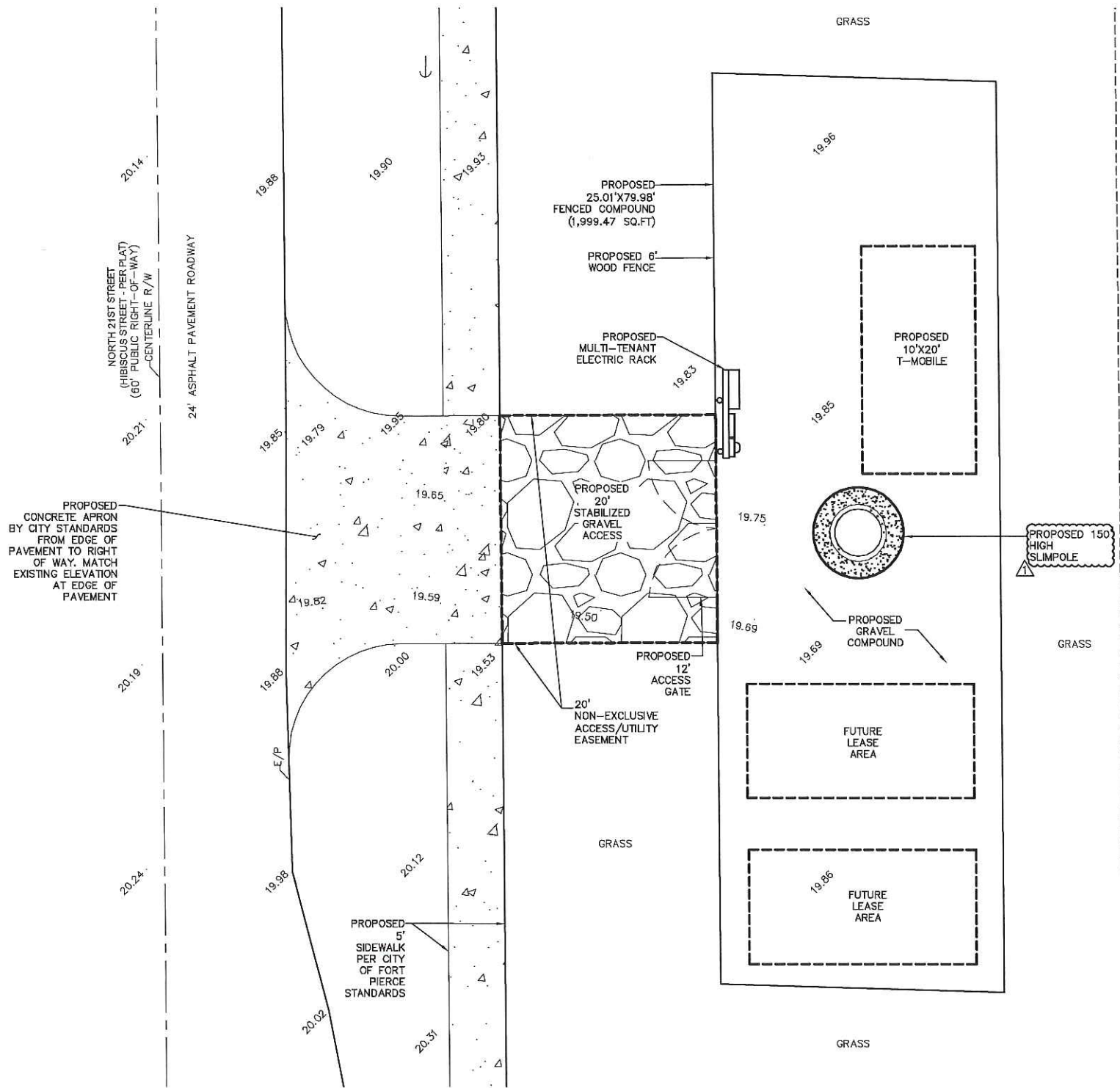
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**FLOOD ZONE INFORMATION**

COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	FIRM ZONE	BASE FLOOD ELEVATION
120286	0176	J	02/16/2012	X	N/A

19.83 EXISTING GRADES NAVD 88

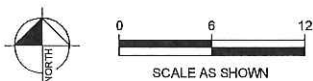


PROPOSED CONCRETE APRON BY CITY STANDARDS FROM EDGE OF PAVEMENT TO RIGHT OF WAY. MATCH EXISTING ELEVATION AT EDGE OF PAVEMENT

PROPOSED 5' SIDEWALK PER CITY OF FORT PIERCE STANDARDS

**DRAINAGE CALCULATIONS:**

- I. GENERAL SITE PLAN INFORMATION:
  - GRAVEL COMPOUND AREA: 1,999.47 SF
  - IMPERVIOUS AREA:
    - PROPOSED TOWER FOUNDATION = 50 SF
    - PROPOSED FUTURE EQUIPMENT SLABS: 450 SF
    - EQUIPMENT SLABS, 3 CARRIER @ 150 SF EACH
  - TOTAL IMPERVIOUS AREA: 500 SF
  - TOTAL PERVIOUS AREA: 1,499.47 SF
- II. CALCULATE REQUIRED STORAGE RUNOFF:
  1. 1" OF RUNOFF OVER TOTAL SITE
    - $Q = 1,999.47 \text{ SF} \times 1" \times 1'/12"$
    - $Q = 166.6 \times 50\% \text{ (ALLOWABLE REDUCTION)}$
    - $Q = 83.3 \text{ CF}$
- III. STORAGE VOLUME PROVIDED:
  - No. 57 STONE COMPOUND, 4" LAYER, 1,999.47 SF COMPOUND. ASSUME 40% VOIDS RATIO.
  - RETENTION VOLUME PROVIDED =  $(1,999.47 \text{ SF} - 500 \text{ SF}) \times 0.4 \times 4"/12" = 199.9 \text{ CF}$
  - RETENTION VOLUME PROVIDED = 199.9 CF
  - RETENTION VOLUME PROVIDED IS GREATER THAN REQUIRED VOLUME



**STORM DRAINAGE PLAN**

NOTE: ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 17 AND 18 OF THE FORT PIERCE CODE OF ORDINANCES AND THE "STANDARD SPECIFICATIONS" ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973.

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**RG Towers, LLC**  
 2141 Alternate A1A South, Suite 440  
 Jupiter, FL 33477

PROJECT INFORMATION:  
**FT PIERCE-ORANGE AVE**  
 2006 ORANGE AVE  
 FORT PIERCE, FL 34950  
 ST LUCIE COUNTY

CURRENT ISSUE DATE:  
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**SITE PLAN REVIEW**

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01-22-18	PER CITY COMMENTS

**MARIA VICTORIA MARTIN**  
 LICENSE  
 No. 72397  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

PLANS PREPARED BY  
**Kimley-Horn**  
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 1920 WEKIVA WAY, SUITE 200  
 WEST PALM BEACH, FLORIDA 33411  
 (561) 845-0665  
 FBPE CAD0000696

PROVIDER:

DRAWN BY: **MM** CHK.: **LF** APV.: **MM**

LICENSURE:  
 MARIA VICTORIA MARTIN PE 72397

SHEET TITLE:  
**STORM DRAINAGE PLAN**

SHEET NUMBER: **3/5** REVISION:

KHA Job #: **144042047**

LANDSCAPE WATERING SPECIFICATIONS AND NOTES

A. WATER-SOLUBLE GEL SOIL AMENDMENT

1. ALL PLANTINGS SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, WITH POLYMER GEL SLURRY (AS DESCRIBED IN THESE SPECIFICATIONS), UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.
2. A WATER-ABSORBING POLYMER GEL PRODUCT (AGRODIAMONDS (TM)) THAT HAS BEEN HYDRATED ACCORDING TO MANUFACTURER'S DIRECTION SHALL BE PLACED INTO EACH HOLE PRIOR TO PLANTING. SEE APPLICATION RATE CHART, THIS SHEET. AGRODIAMONDS (TM) BY AGROTECH AMERICA (561) 743-8025.

B. WATER

1. 90 DAYS OF WATER MONITORING SHALL BE SCHEDULED FOR ALL PLANTINGS UNDER THIS CONTRACT.
2. IF SITE EXPERIENCES DROUGHT OR IF RAINFALL DOES NOT ACCUMULATE 2" PER WEEK DURING THE MONITORING PERIOD, HAND WATERING WILL BE NECESSARY.
3. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER (MEETING THE ABOVE STANDARD) FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER. SUITABLE WATER MAY BE AVAILABLE IN THE ADJACENT CANAL - COORDINATE WITH OWNER FOR PERMISSIONS.
4. WATERING PROJECT PLANTINGS MAY BE ACHIEVED BY WATER TRUCK OR BY TEMPORARY IRRIGATION SYSTEM, WHICH MUST BE REMOVED AT THE END OF THE MAINTENANCE PERIOD.
5. CONTRACTOR SHALL SUPPLEMENT RAINFALL BY HAND-WATERING AND DOCUMENT WATERING EFFORTS THROUGH RAINFALL DATA AND MONITORING RECORDS.
6. FOR BIDDING PURPOSES, FOLLOW THE SCHEDULE BELOW:  
 DAY 1: WATER IN PLANTINGS PER SPECS.  
 DAY 2-30: 1/2" OF WATER EACH DAY FOR MON, WED, SATURDAY  
 DAY 31-90: 1/2" OF WATER EACH DAY FOR MON, SATURDAY

C. FERTILIZER

CONTRACTOR SHALL INCLUDE FERTILIZER IN HYDRATED GEL SLURRY MIX. FERTILIZER SHALL BE A WATER SOLUBLE 14-14-14, CONTROLLED-RELEASE TYPE. MIX WITH GEL AT A RATE OF ONE OUNCE PER PLANT. ESTIMATE PLANT QUANTITIES FOR GEL PRODUCT AND MIX FERTILIZER APPROPRIATELY.

SIX WEEKS AFTER PLANTING, BROADCAST 10-10-10 CONTROLLED-RELEASE FERTILIZER AT A RATE OF 400 LBS PER ACRE OVER THE ENTIRE PLANTED AREA.

CONTAINER SIZE	AGRODIAMONDS (TM) (RAW PRODUCT)
30 GAL	8 CUPS (46 OZ)
7 GAL	2 CUPS (11.5 OZ)

\*MIX INTO BACKFILL MATERIAL FOR PLANT PITS. WORK MIX INTO SOIL WITH SHOVEL/SPADE.  
 \*AGRODIAMONDS (TM) MUST BE HYDRATED (WATER-IN) FROM TOP. DO NOT WATER BY INJECTION (SUBSURFACE).  
 \*MIX FERTILIZER IN HOLE PRIOR TO WATERING.

PLANTING NOTES:

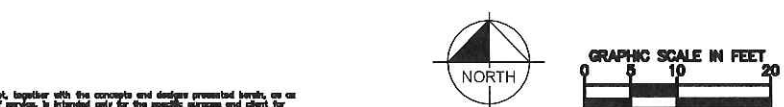
1. CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES AND ALL CONTRACT DOCUMENTS FOR FURTHER AND COMPLETE INSTRUCTIONS.
2. PLANT LIST QUANTITIES ARE PROVIDED FOR CONVENIENCE. IN THE EVENT OF QUANTITY DISCREPANCIES THE DRAWING SHALL TAKE PRECEDENCE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING.
3. PLANT SIZES LISTED ARE THE MINIMUM SIZE THAT WILL BE ACCEPTED FOR THAT PLANT.
4. ANY SUBSTITUTION IN SIZE AND/OR PLANT MATERIAL MUST BE APPROVED BY THE LANDSCAPE ARCHITECT IN WRITING. ALL PLANTS WILL BE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNERS REPRESENTATIVE BEFORE PLANTING CAN BEGIN.
5. CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR INTERFERE WITH EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
6. THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING OF SOILS, AMENDMENTS, ETC. ASSOCIATED WITH THE WORK AND INCLUDED IN THE SPECIFICATIONS.
7. CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LIMITS OF WORK AND EXISTING CONDITIONS AND VERIFY ALL INFORMATION. IF DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IN WRITING WITHIN SEVEN CALENDAR DAYS OF NOTICE TO PROCEED.

PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	CONT.	GAL.	SIZE	QTY
QV	Quercus virginiana	Southern Live Oak	30 gal	3" Cal.	10'HT X 5'SPR	7
SHRUBS	BOTANICAL NAME	COMMON NAME	CONT.	Q.C.	SIZE	QTY
PM	Podocarpus macrophyllus	Podocarpus	7 gal	36" O.C.	6'H Min	74

CODE COMPLIANCE SUMMARY:

PERIMETER BUFFER REQUIRED:	PROVIDED:
SHADE TREES 1/30 LF 193 LF / 30 LF	7 SHADE TREES
CONTINUOUS HEDGE 6' H	CONTINUOUS HEDGE 6' H



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SEAL:

PLANS PREPARED BY: CH  
  
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 (561) 845-0665  
 FBPE CAD0000696

PROVIDER:

DRAWN BY: MM    CHK.: LF    APV.: MM

LICENSURE:  
 TRICIA C. RICHTER, PLA    LA#6667244

SHEET TITLE:  
 LANDSCAPE PLANS

SHEET NUMBER: 4/5    REVISION:

KHA Job #: 144042047

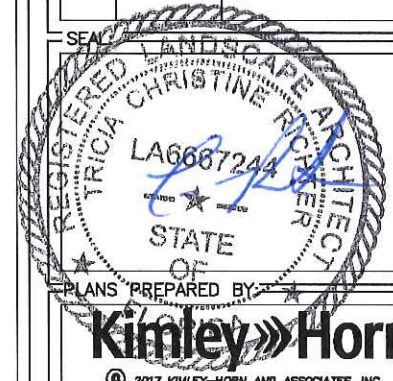
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FBPE CA00000686

PROVIDER:  
DRAWN BY: **CHK.** APV.:  
**MM LF MM**

LICENSURE:  
**TRICIA C. RICHTER, FLA LA#6687244**

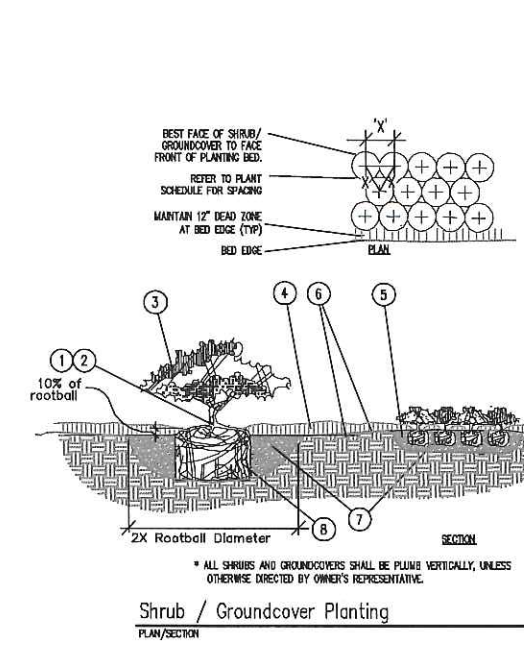
SHEET TITLE:  
**LANDSCAPE DETAILS**

SHEET NUMBER: **5/5** REVISION:

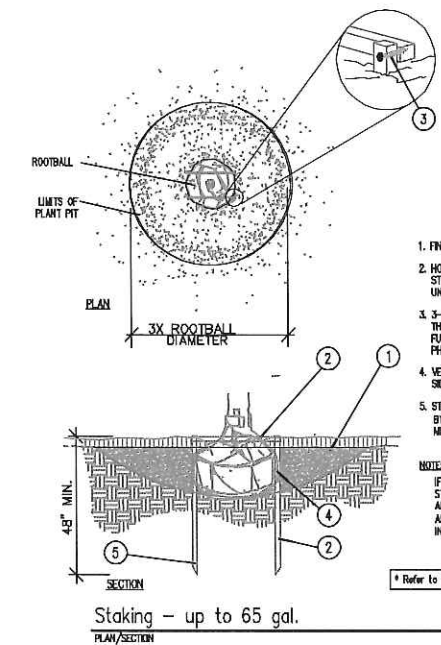
KHA Job #: **144042047**

**NOTES:**

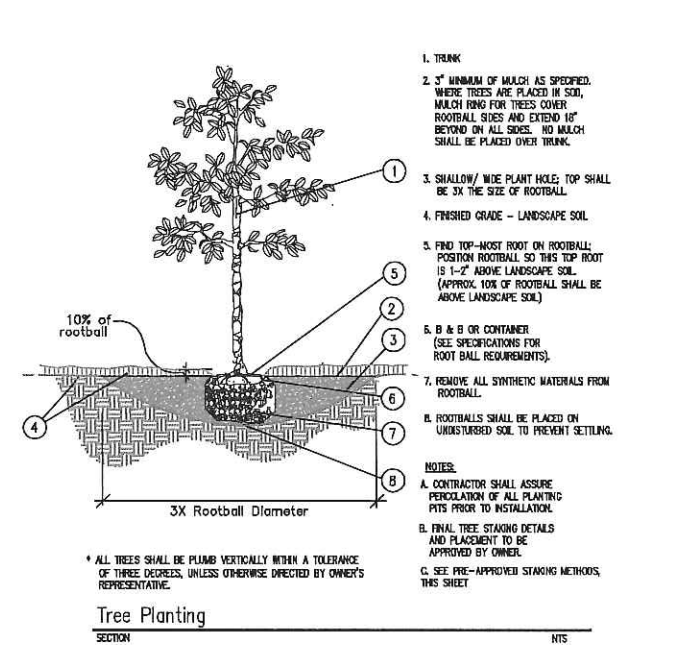
1. FIND POINT WHERE TOPMOST ROOT EMERGES FROM TRUNK WITHIN 2' OF SURFACE. CLEAR EXCESS SOIL IF NECESSARY.
2. TOP 10% OF SHRUB AND GROUNDCOVER ROOTBALLS TO BE PLANTED ABOVE THE LANDSCAPE GRADE. DO NOT COVER EXPOSED 10% ON SIDES WITH SOIL.
3. PRUNE ALL LIKE SHRUBS WITHIN A PLANTED MASS TO ACHIEVE A UNIFORM MASS/HEIGHT.
4. 3" MINIMUM MULCH AS SPECIFIED - DO NOT COVER ENTIRE SHRUB ROOTBALL OR CREATE "WATER BASKETS" ONLY COVER SIDES OF ROOTBALL WITH MULCH.
5. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
6. FINISHED GRADE (SEE GRADING PLAN).
7. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GRASS SEEDS OR MULCH ARE USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
8. SCARIFY ROOTBALL SIDES AND BOTTOM.



1. FINISH GRADE
  2. HORIZONTAL 2X2 SOREME TO 2X2 STAKE. ALL WOOD SHALL BE #2 UNWEATED.
  3. 3-1/2" DRYWALL SOREME. THREAD SIZE 1/2" SHARP POINT, FULL THREAD, BLACK PHOSPHATE FINISH.
  4. VERTICAL STAKES SHALL ABUT SIDE OF ROOTBALL.
  5. STAKES TO EXTEND INTO NATIVE SOIL BY 1-1/2 X THE ROOTBALL DEPTH MIN.
- NOTE:  
IF SPATIAL REQUIREMENTS PRECLUDE STAKING WITH THIS METHOD, SUBMIT ALTERNATE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLING PLANT.
- \* Refer to details B and D for planting



1. TRUNK
  2. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOIL, MULCH RING FOR TREES COVER ROOTBALL SIDES AND EXTEND 18" BEYOND ON ALL SIDES. NO MULCH SHALL BE PLACED OVER TRUNK.
  3. SHALLOW/ WIDE PLANT HOLE. TOP SHALL BE 3X THE SIZE OF ROOTBALL.
  4. FINISHED GRADE - LANDSCAPE SOIL
  5. FIND TOP-HOIST ROOT ON ROOTBALL. POSITION ROOTBALL SO THIS TOP ROOT IS 1-2" ABOVE LANDSCAPE SOIL (APPROX. 10% OF ROOTBALL SHALL BE ABOVE LANDSCAPE SOIL).
  6. B & B OR CONTAINER (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
  7. REMOVE ALL SYNTHETIC MATERIALS FROM ROOTBALL.
  8. ROOTBALLS SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT SETTLING.
- NOTES:  
A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.  
B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.  
C. SEE PRE-APPROVED STAKING METHODS, THIS SHEET



- A. SCOPE OF WORK**
1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.
  2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.
- B. PROTECTION OF EXISTING STRUCTURES**
- ALL EXISTING BUILDINGS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.
- C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK**
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DROP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DROP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPE AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS (\$100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FOLLOWS AND ADDED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.
- D. MATERIALS**
- 1. PLANT MATERIALS**
- A. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1982 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRASSES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.
- B. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.
- C. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, EXISTING DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

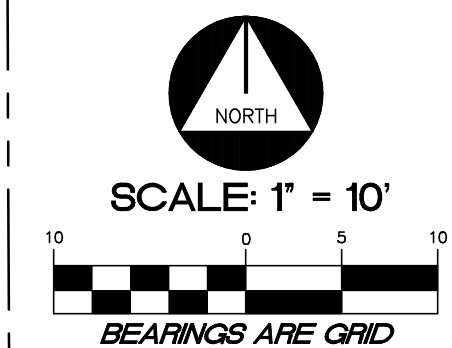
- E. SOIL MIXTURE (PLANTING MEDIUM, PLANTING MIX, TOPSOIL MIX)**
1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW.
  2. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRAGILE, AND OF A LOAMY CHARACTER, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER, FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEIOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.
  3. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY THE OWNER.
  4. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.
  5. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.
- F. WATER**
- WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARDS SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.
- \*WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.
- G. FERTILIZER**
- CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.
- \*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.
- H. MULCH**
- MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF 3 INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE), TYPE OF MATERIAL: PINE STRAW
- I. PLANTING PROCEDURES**
1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE WASTE. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
  2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MARK AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL - 811 - TO LOCATE UTILITIES.
  3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED UNDERGROUNDED SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF UNDERGROUNDED OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.

- J. LAWN SODDING**
1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
  2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
  3. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. NET PREPARED AREA THOROUGHLY.
  4. SODDING
    - A. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.
    - B. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETY TYPE, AND FREE FROM WEEDS, FUNGI, INSECTS AND DISEASE OF ANY KIND.
    - C. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO HAVE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED - REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.
  5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.
  6. LAWN MAINTENANCE:
    - A. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"x12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRAVING IF NECESSARY).
    - B. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.
  7. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

- K. GENERAL**
- CONPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.
- L. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.**
- M. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 2801, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "LETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.**
- N. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.**
- O. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.**
- P. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).**
- Q. AMEND PINE AND OAK PLANT PITS WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITAL PRIOR TO INOCULATION.**
- R. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ONLY WITH MULCH. ALL BURLAP, ROPE, WIRE BASKETS, ETC., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.**
- S. PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORISTS, IN ACCORDANCE WITH ANSI A-300.**
- T. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.**
- U. MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, WINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.**
- V. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED UNDERGROUNDED SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF UNDERGROUNDED OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.**

This document, together with the concepts and design presented herein, are an integral part of the contract. It is intended only for the specific purpose and client for which it was prepared. Issues of and changes to the contract must be made without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

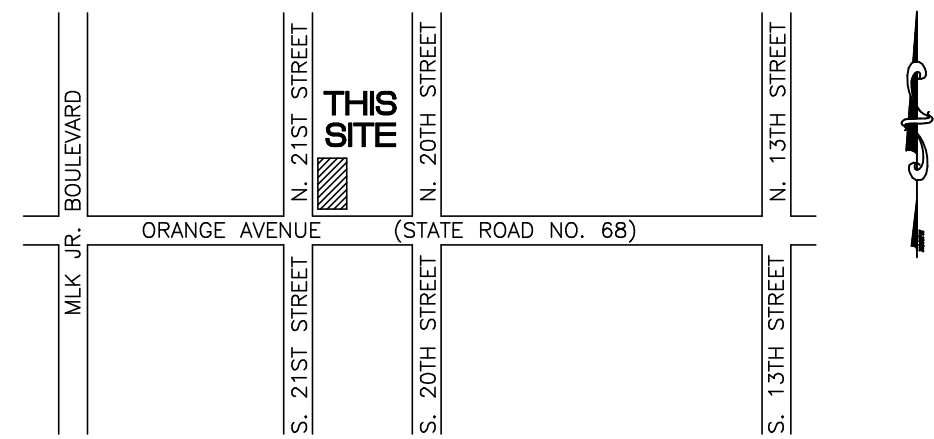
**SKETCH OF PARENT TRACT BOUNDARY  
DETAIL OF RG TOWERS LEASE PARCEL  
NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT  
2006 ORANGE AVENUE, FORT PIERCE, FL 34950  
ORANGE AVENUE**



**BEARING NOTE**

THE BEARINGS SHOWN HEREON ARE GRID NORTH AND RELATIVE TO THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) FLORIDA PERMANENT REFERENCE NETWORK (FPRN) THAT IS RELATIVE TO THE NORTH AMERICAN DATUM OF 1983/2011 (NAD83/2011), AS PROJECTED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM (EAST ZONE).  
THE BEARING REFERENCE LINE IS THE NORTH LINE OF BLOCK 3, FLORIANA PARK, PLAT BOOK 2, PAGE 7, SAINT LUCIE COUNTY PUBLIC RECORDS, HAVING A GRID BEARING OF S88°19'00"E.

**ORANGE AVENUE**



**LOCATION SKETCH**  
SECTION 09-1555-140E  
NOT TO SCALE

**LEGEND**

- |          |                          |    |                   |
|----------|--------------------------|----|-------------------|
| P.O.C.   | POINT OF COMMENCEMENT    | MM | WATER METER       |
| P.O.B.   | POINT OF BEGINNING       | SM | SANITARY MANHOLE  |
| S.L.C.R. | ST. LUCIE COUNTY RECORDS | AW | GUY ANCHOR WIRE   |
| R/W      | RIGHT-OF-WAY             | SC | SANITARY CLEANOUT |
| E/P      | EDGE OF PAVEMENT         | PH | FIRE HYDRANT      |
| O.R.     | OFFICIAL RECORD          | BL | BOLLARD           |
| (P)      | PLAT                     | ES | ELECTRIC SERVICE  |
| SPOT     | ELEVATION                | LP | LAMP POST         |
| PT       | PINE TREE                | EM | ELECTRIC METER    |
| HP       | HANDICAP PARKING         | GM | GAS METER         |
| WUP      | WOOD UTILITY POLE        | ST | STORE SIGN        |
| OH       | OVERHEAD UTILITY         |    |                   |

**DESCRIPTION OF PARENT TRACT**

(PER OFFICIAL RECORD BOOK 3822, PAGE 1761 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA)  
LOTS 3, 4 AND 5, LESS THE SOUTH 15 FEET THEREOF, BLOCK 3 OF FLORIANA PARK, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 2, PAGE 7C, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

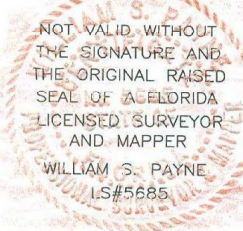
**REPORT OF BOUNDARY AND TOPOGRAPHIC SURVEY**

1. THE PARENT TRACT SHOWN HEREON IS BASED ON A SEARCH CONDUCTED BY WSP CONSULTANTS, INC. OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. THE REPORT OF TITLE PREPARED BY U.S. TITLE SOLUTIONS, DATED OCTOBER 14, 2017, FILE NO. 58394-FL1710-5030.
2. UNLESS OTHERWISE NOTED HEREON RECORD AND MEASURED VALUES (SHOWN) ARE IN SUBSTANTIAL AGREEMENT.
3. THE PURPOSE OF THIS SURVEY IS TO LOCATE THE EXISTING FEATURES WITHIN THE PARENT TRACT FOR THE FUTURE INSTALLATION OF A COMMUNICATIONS FACILITY.
4. THE EXPECTED USE OF THE SURVEY AND MAP IS FOR THE PREPARATION OF LEASE AGREEMENTS, DESIGN PLANS, PERMITTING SETS AND CONSTRUCTION OF A MONOPOLE TOWER ON THE PARENT TRACT.
5. THIS SURVEY IS CLASSIFIED AS COMMERCIAL/HIGH RISK AND EXCEEDS THE MINIMUM RELATIVE DISTANCE ACCURACY OF 1 FOOT IN 10,000 FEET AS REQUIRED BY THE FLORIDA STANDARDS OF PRACTICE (FS-17.051 THROUGH FS-17.053 F.A.C.). THE ACCURACY OBTAINED BY MEASUREMENT AND CALCULATION OF A CLOSED GEOMETRIC FIGURE WAS FOUND TO EXCEED THIS REQUIREMENT.
6. ALL MEASUREMENTS ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD, IN FEET.
7. THE HORIZONTAL FEATURES SHOWN HEREON ARE PLOTTED TO WITHIN 1/20 OF THE MAP SCALE.
8. HORIZONTAL AND VERTICAL DATA SHOWN HEREON WAS OBTAINED UTILIZING A "LEICA TCPR1205+" TOTAL STATION AND "ALLEGRO MX CARLSON" DATA COLLECTION SYSTEM.
9. ELEVATIONS OF WELL-IDENTIFIED FEATURES CONTAINED IN THIS SURVEY AND MAP HAVE BEEN MEASURED TO AN ESTIMATED VERTICAL ACCURACY OF 0.1'.
10. HORIZONTAL FEATURE LOCATION IS TO THE CENTER OF THE SYMBOL AND MAY BE ENLARGED FOR CLARITY.
11. UNDERGROUND FOUNDATIONS AND/OR UTILITIES HAVE NOT BEEN LOCATED.
12. FLOOD ZONE INFORMATION SHOWN HEREON WAS OBTAINED FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), FLOOD INSURANCE RATE MAP (FIRM).
13. THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE REFERENCED TO THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) FLORIDA PERMANENT REFERENCE NETWORK (FPRN). THE MEASUREMENTS WERE OBTAINED UTILIZING A "HEMISPHERE S320 GNSS" RTK GPS RECEIVER.
14. THE VALUES FOR THE LATITUDE, LONGITUDE AND ELEVATIONS SHOWN HEREON ARE WITHIN THE ALLOWABLE TOLERANCES FOR THE FEDERAL AVIATION ADMINISTRATION 1-A LETTER.
15. THE LATITUDE AND LONGITUDE SHOWN HEREON WERE OBTAINED UTILIZING THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) FLORIDA PERMANENT REFERENCE NETWORK (FPRN) THAT IS RELATIVE TO THE NORTH AMERICAN DATUM OF 1983/2011 (NAD83/2011), AS PROJECTED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM (EAST ZONE). THE MEASUREMENTS WERE OBTAINED UTILIZING A "HEMISPHERE S320 GNSS" RTK GPS RECEIVER.
16. THE RG TOWERS LEASE PARCEL SHOWN IN THIS SURVEY LIES ENTIRELY WITHIN THE DESCRIBED PARENT TRACT.
17. THE SURVEYOR HAS REVIEWED THE REPORT OF TITLE PREPARED BY U.S. TITLE SOLUTIONS, DATED OCTOBER 14, 2017, FILE NO. 58394-FL1710-5030. ALL PLOTTABLE MATTERS OF RECORD IDENTIFIED IN THE REPORT OF TITLE THAT ARE PERTINENT TO THE RG TOWERS LEASE PARCEL AND ITS ACCESS AND UTILITY EASEMENT, IF APPLICABLE, HAVE BEEN SHOWN OR NOTED ON THIS SURVEY. THE SURVEYOR RELIED SOLELY UPON THAT REPORT OF TITLE WITH RESPECT TO EASEMENTS, RIGHTS-OF-WAY, SETBACK LINES AGREEMENTS, RESERVATIONS AND OTHER SIMILAR MATTERS.
18. BASED UPON THE REPORT OF TITLE, THE RG TOWERS LEASE PARCEL HAS ACCESS TO N. 21ST STREET, A PUBLIC RIGHT-OF-WAY, BY MEANS OF THE ACCESS AND UTILITY EASEMENT DEPICTED HEREON. THE EASEMENT LIES ENTIRELY WITHIN THE LANDS OF THE OWNER(S) OF THE PARCEL DESCRIBED IN SAID REPORT OF TITLE AND NO EASEMENTS OR RIGHTS OF OTHER THIRD PARTIES DISCLOSED BY THAT REPORT OF TITLE WOULD PRECLUDE ACCESS OVER THE PARENT TRACT FROM THE RG TOWERS LEASE PARCEL TO THAT PUBLIC RIGHT-OF-WAY.
19. 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.
20. SURVEY DATE: FIELD SURVEY WAS COMPLETED OCTOBER 10, 2017, WHICH IS THE DATE OF DATA ACQUISITION.

**CERTIFICATE**

I, WILLIAM S. PAYNE, DO HEREBY STATE THAT THIS MAP OF BOUNDARY AND TOPOGRAPHIC SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND IS ACCURATE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER STATE THAT THIS MAP OF BOUNDARY AND TOPOGRAPHIC SURVEY WAS COMPLETED IN ACCORDANCE WITH THE STANDARDS OF PRACTICE FOR SURVEYING AND MAPPING STATED IN RULES 5J-17.051 THROUGH 5J-17.053 OF THE FLORIDA ADMINISTRATIVE CODE, PURSUANT TO FLORIDA STATUTES CHAPTER 472.027.

*W.S. Payne*  
WILLIAM S. PAYNE  
PROFESSIONAL SURVEYOR AND MAPPER #LS 5685  
WSP CONSULTANTS, INC. #LB 7188  
STATE OF FLORIDA



**MAP OF BOUNDARY AND TOPOGRAPHIC SURVEY**

**ORANGE AVENUE**

PREPARED FOR:  
**RG Towers, LLC**

LOCATED IN:  
**ST. LUCIE COUNTY, FLORIDA**

PROJECT NO:  
**17-1404**

SHEET NO:  
**1 OF 2**

**150' MONOPOLE  
PROPOSED TOWER INFORMATION**

LATITUDE = 27°26'51.584" NORTH  
LONGITUDE = 080°20'45.150" WEST  
NORTH AMERICAN DATUM OF 1983/2011 NAD 83(2011)  
EXISTING AVERAGE GROUND ELEVATION AT TOWER = 19.8 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

SEE SHEET 2 OF 2 FOR DESCRIPTION OF  
RG TOWERS LEASE PARCEL  
NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT  
SEE SHEET 2 OF 2 FOR REVIEW OF TITLE SEARCH REPORT

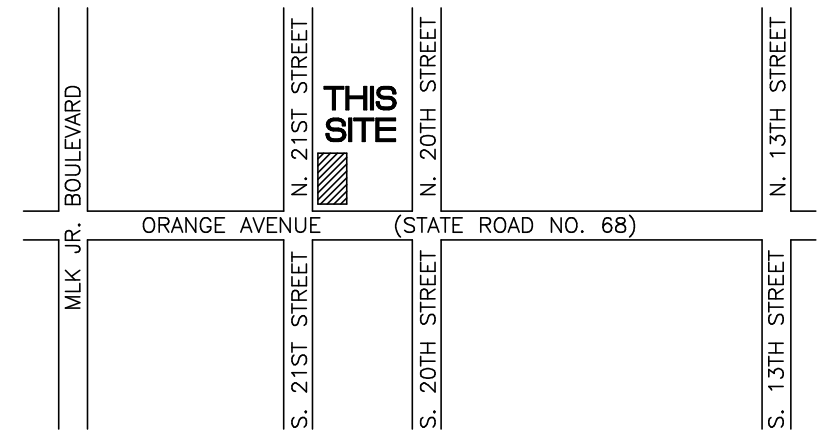
FLOOD ZONE INFORMATION				
COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	FIRM ZONE
120286	0178	J	02/16/2012	X
				N/A

FIELD SURVEY DATE: 10/10/2017				
DRAWN: WSP				
CHECKED: WSP				
MANAGER: WSP	1	01/23/2018	REVISE SURVEY TO ADDRESS ST. LUCIE COUNTY SURVEYOR COMMENTS	
DWG FILE: 17-1404.DWG	No.	DATE	REVISION	

**WSP Consultants, Inc.**  
**SURVEYORS & MAPPERS**  
18815 ANNELIS DRIVE, LUTZ, FL 33548  
PHONE (813) 909-2420  
PROFESSIONAL SURVEYING & MAPPING CERTIFICATE OF AUTHORIZATION:  
LB 7188, STATE OF FLORIDA

**MAP OF BOUNDARY AND TOPOGRAPHIC SURVEY**  
**ORANGE AVENUE**  
PREPARED FOR:  
**RG Towers, LLC**  
LOCATED IN:  
**ST. LUCIE COUNTY, FLORIDA**

**ORANGE AVENUE**



**LOCATION SKETCH**  
SECTION 09-1555-140E  
NOT TO SCALE

**150' MONOPOLE PROPOSED TOWER INFORMATION**

LATITUDE = 27°26'51.584" NORTH  
LONGITUDE = 080°20'45.150" WEST  
NORTH AMERICAN DATUM OF 1983/2011 NAD 83/2011)  
EXISTING AVERAGE GROUND ELEVATION AT TOWER = 19.8 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

**DESCRIPTION OF RG TOWERS LEASE PARCEL**

A PARCEL OF LAND BEING A PORTION OF LOT 5, BLOCK 3, FLORIANA PARK, AS RECORDED IN PLAT BOOK 2, PAGE 7C OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID LOT 5, BLOCK 3;

THENCE ON A GRID BEARING OF S88°19'00"E ALONG THE NORTH LINE OF LOT 5, BLOCK 3, A DISTANCE OF 19.52 FEET;

THENCE S01°41'00"W A DISTANCE OF 15.00 FEET TO A POINT ON A LINE 15.00 FEET SOUTH OF AND PARALLEL WITH THE NORTH LINE OF SAID LOT 5, BLOCK 3, SAID POINT ALSO BEING THE POINT OF BEGINNING;

THENCE S88°19'00"E ALONG SAID PARALLEL LINE, A DISTANCE OF 25.01 FEET;

THENCE S00°16'00"E A DISTANCE OF 79.98 FEET TO A POINT ON A LINE 25.00 FEET NORTH OF AND PARALLEL WITH THE NORTH RIGHT-OF-WAY LINE OF ORANGE AVENUE (80 FOOT PUBLIC RIGHT-OF-WAY);

THENCE N88°19'00"W ALONG SAID PARALLEL LINE, A DISTANCE OF 25.01 FEET TO A POINT ON A LINE 19.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SAID LOT 5, BLOCK 3;

THENCE N00°16'00"W ALONG SAID PARALLEL LINE, A DISTANCE OF 79.98 FEET TO THE POINT OF BEGINNING;

SAID PARCEL OF LAND SITUATE WITHIN ST. LUCIE COUNTY, FLORIDA CONTAINING 1,999.47 SQUARE FEET MORE OR LESS.

**DESCRIPTION OF NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT**

A PARCEL OF LAND BEING A PORTION OF LOT 5, BLOCK 3, FLORIANA PARK, AS RECORDED IN PLAT BOOK 2, PAGE 7C OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID LOT 5, BLOCK 3;

THENCE ON A GRID BEARING OF S88°19'00"E ALONG THE NORTH LINE OF LOT 5, BLOCK 3, A DISTANCE OF 19.52 FEET;

THENCE S01°41'00"W A DISTANCE OF 15.00 FEET TO A POINT ON A LINE 15.00 FEET SOUTH OF AND PARALLEL WITH THE NORTH LINE OF SAID LOT 5, BLOCK 3;

THENCE S88°19'00"E ALONG SAID PARALLEL LINE, A DISTANCE OF 25.01 FEET;

THENCE S00°16'00"E A DISTANCE OF 79.98 FEET TO A POINT ON A LINE 25.00 FEET NORTH OF AND PARALLEL WITH THE NORTH RIGHT-OF-WAY LINE OF ORANGE AVENUE (80 FOOT PUBLIC RIGHT-OF-WAY);

THENCE N88°19'00"W ALONG SAID PARALLEL LINE, A DISTANCE OF 25.01 FEET TO A POINT ON A LINE 19.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF SAID LOT 5, BLOCK 3;

THENCE N00°16'00"W ALONG SAID PARALLEL LINE, A DISTANCE OF 29.99 FEET TO THE POINT OF BEGINNING;

THENCE S89°44'00"W A DISTANCE OF 19.00 FEET TO A POINT ON THE WEST LINE OF SAID LOT 5, BLOCK 3, SAID POINT ALSO BEING ON THE EAST RIGHT-OF-WAY LINE OF NORTH 21ST STREET (60 FOOT PUBLIC RIGHT-OF-WAY);

THENCE N00°16'00"W ALONG SAID WEST LINE AND EAST RIGHT-OF-WAY LINE, A DISTANCE OF 20.00 FEET;

THENCE N89°44'00"E A DISTANCE OF 19.00 FEET;

THENCE S00°16'00"E A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING;

SAID PARCEL OF LAND SITUATE WITHIN ST. LUCIE COUNTY, FLORIDA CONTAINING 380.00 SQUARE FEET MORE OR LESS.

**REVIEW OF TITLE SEARCH REPORT**

I HAVE REVIEWED THE REPORT OF TITLE PREPARED BY U.S. TITLE SOLUTIONS, DATED OCTOBER 14, 2017, FILE NO. 58394-FL1710-5030, AND FIND AS FOLLOWS WITH RESPECT TO MATTERS OF RECORDS LISTED IN SAID REPORT.

1. TAXES, TAX LIENS, TAX SALES, WATER RATES, SEWER AND ASSESSMENTS SET FORTH IN SCHEDULE HEREIN.
2. MORTGAGES RETURNED HEREIN. (-3-). SEE SEPARATE MORTGAGE SCHEDULE.
3. ANY STATE OF FACTS WHICH AN ACCURATE SURVEY MIGHT SHOW OR SURVEY EXCEPTIONS SET FORTH HEREIN.
4. RIGHTS OF TENANTS OR PERSON IN POSSESSION.

(JUDGMENTS, LIENS AND UCC)  
5. NONE WITHIN PERIOD SEARCHED

(COVENANTS/RESTRICTIONS)  
6. NONE WITHIN PERIOD SEARCHED

(EASEMENTS AND RIGHTS OF WAY)  
7. NONE WITHIN PERIOD SEARCHED

(OTHER FILED DOCUMENTS)  
8. PLAT OF FORT PIERCE FARMS IN BOOK 2, PAGE 7-A.

- PARENT TRACT DOES NOT LIE WITHIN SAID PLAT.

9. PLAT OF OAKLAND PARK IN BOOK 2, PAGE 7-B.

- PARENT TRACT DOES NOT LIE WITHIN SAID PLAT.

10. PLAT OF FLORIANA PARK IN BOOK 2, PAGE 7-C.

- BLANKET IN NATURE - PARENT TRACT LIES COMPLETELY WITHIN SAID PLAT.

- THERE ARE NO EASEMENTS, RESTRICTIONS AND / OR SETBACKS DEPICTED ON SAID PLAT, NOTHING TO PLOT.

11. CERTIFICATION OF TRUST BETWEEN JOHN C. WALKER TRUST DATED JULY 26, 1994 AND JOHN C. WALKER, TRUSTEE OF THE JOHN C. WALKER TRUST DATED JULY 26, 1994 DATED 12/24/2015 RECORDED 12/31/2015 IN BOOK 3822, PAGE 1764.

- BLANKET IN NATURE - DESCRIBES PARENT TRACT.

- SAID TRUST IS NO LONGER THE OWNER OF THE PARENT TRACT.

12. MEMORANDUM OF WIRELESS COMMUNICATIONS FACILITY LEASE BETWEEN LESLEY PHILLIPS & ABDEL JEDBAR ELBAKARRI, A MARRIED COUPLE AND RG TOWERS, LLC, A DELAWARE LIMITED LIABILITY COMPANY DATED 9/27/2017 RECORDED 10/2/2017 IN BOOK 4047, PAGE 36.

- BLANKET IN NATURE - DESCRIBES PARENT TRACT.

SEE SHEET 1 OF 2 FOR DETAIL OF  
RG TOWERS LEASE PARCEL  
NON-EXCLUSIVE ACCESS AND UTILITY EASEMENT

FLOOD ZONE INFORMATION					
COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	FIRM ZONE	BASE FLOOD ELEVATION
120286	0178	J	02/16/2012	X	N/A

FIELD SURVEY DATE:	10/10/2017								
DRAWN:	WSP								
CHECKED:	WSP								
MANAGER:	WSP	1	01/23/2018	REVISE SURVEY TO ADDRESS ST. LUCIE COUNTY SURVEYOR COMMENTS					WSP
DWG FILE:	17-1404.DWG	No.	DATE						BY

**WSP Consultants, Inc.**  
SURVEYORS & MAPPERS  
18815 ANNELIS DRIVE, LUTZ, FL 33548  
PHONE (813) 909-2420  
PROFESSIONAL SURVEYING & MAPPING CERTIFICATE OF AUTHORIZATION:  
LB 7188, STATE OF FLORIDA

MAP OF BOUNDARY AND TOPOGRAPHIC SURVEY  
ORANGE AVENUE  
PREPARED FOR:  
**RG Towers, LLC**  
LOCATED IN:  
ST. LUCIE COUNTY, FLORIDA

PROJECT NO:  
17-1404  
SHEET NO:  
2 OF 2

# Kimley»»Horn

January 26, 2018

City of Fort Pierce  
Planning Department  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

**Re: Fort Pierce-Orange Avenue Telecommunications Tower  
2006 Orange Ave, Fort Pierce, FL 34950**

Dear Sir,

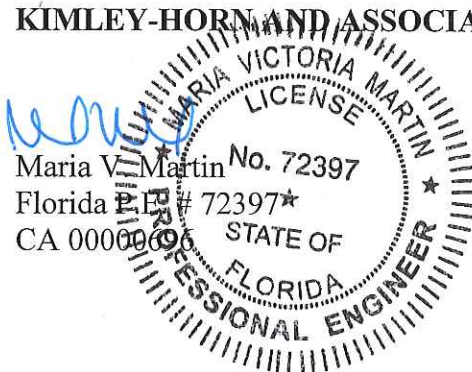
Please be advised that the estimate cost of the proposed tower demolition and removal is \$8,000.00. The estimate listed is equivalent to 100% of the actual estimated cost of the tower steel demolition and removal.

The estimate was based on standard construction practices. This office cannot estimate construction costs for any time other than that of the date of the estimate.

If you have any questions regarding this issue, please call me at 561-845-0665.

Sincerely,

**KIMLEY-HORN AND ASSOCIATES, INC.**



Tower Removal Bond

KNOW ALL PERSONS BY THESE PRESENTS: That we RG Towers, LLC, a corporation duly organized under the laws of the State of DE, as Principal and The Hanover Insurance Company, as Surety, are held and firmly bound unto City of Fort Pierce, Florida as Obligee, in the amount of Eight Thousand Dollars and 00/100 (\$8,000.00) for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, the liability of the Surety being limited to the penal sum of this bond regardless of the number of years the bond is in effect.

Whereas, the Principal has obtained written approval from the Obligee for the construction and erection of a wireless communication tower located at 2006 Orange Ave, Fort Pierce, Florida 34950, Tax Parcel Number 2409-605-0008-000-4. Now, therefore if the principal well and truly complies with the maintenance, replacement, removal or relocation of the tower from the aforementioned address within 30 days upon receipt of written notice from the Obligee, to remove, replace, modify, or relocate the tower from said premises then this obligation is void otherwise to remain in full force and effect unless cancelled as set forth below:

1. It shall be a condition precedent to any right of recovery hereunder that, in the event of any default on the part of the Principal, a written statement of the particular facts of such default shall be, within Thirty (30) days, delivered to Surety at it Home Office located at 440 Lincoln Street, Worcester, MA 01653 by registered mail to the Surety and the Surety shall not be obligated to perform Principals obligation until sixty (60) days after Surety's receipt of such statement.
2. The Surety may cancel this bond at any time by giving Thirty (30) days notice, by registered mail or overnight courier service to Planning Department, 100 North US 1, PO Box 1480, Fort Pierce, FL 34950 (Obligee). Such termination shall not affect liability incurred under this obligation prior to the effective date of such termination.
3. No action, suit, or proceeding shall be maintained against the Surety on this bond unless the action is brought within twelve (12) months of the cancellation date of this bond.
4. Regardless of the number of years this bond may be renewed; in no event shall the liability of the Surety exceed the penal sum of this bond.
5. It is understood that the non-renewal of this bond by the Surety, or failure or inability of the Principal to file a replacement bond shall not constitute a loss recoverable by the Obligee under this bond.

Signed, sealed, and witnessed this 26th day of January, 2018.

Holly Valdez  
Witness

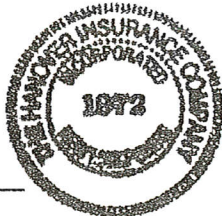
RG Towers, LLC  
Principal

By: S. Peh

The Hanover Insurance Company  
Surety

By: Richard A. Montgomery, Attorney-in-Fact

LeeAnne K. Michaud  
Witness LeeAnne K. Michaud



**THE HANOVER INSURANCE COMPANY  
MASSACHUSETTS BAY INSURANCE COMPANY  
CITIZENS INSURANCE COMPANY OF AMERICA**

POWERS OF ATTORNEY  
CERTIFIED COPY

KNOW ALL MEN BY THESE PRESENTS: That THE HANOVER INSURANCE COMPANY and MASSACHUSETTS BAY INSURANCE COMPANY, both being corporations organized and existing under the laws of the State of New Hampshire, and CITIZENS INSURANCE COMPANY OF AMERICA, a corporation organized and existing under the laws of the State of Michigan, do hereby constitute and appoint

**Richard A. Montgomery**

of Columbia, MD and each is a true and lawful Attorney(s)-in-fact to sign, execute, seal, acknowledge and deliver for, and on its behalf, and as its act and deed any place within the United States, or, if the following line be filled in, only within the area therein designated

any and all bonds, recognizances, undertakings, contracts of indemnity or other writings obligatory in the nature thereof, as follows:

Surety Bond Number: 1066222  
Principal: RG Towers, LLC  
Obligee: City of Fort Pierce, Florida

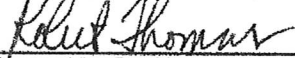
and said companies hereby ratify and confirm all and whatsoever said Attorney(s)-in-fact may lawfully do in the premises by virtue of these presents. These appointments are made under and by authority of the following Resolution passed by the Board of Directors of said Companies which resolutions are still in effect:

"RESOLVED, That the President or any Vice President, in conjunction with any Vice President, be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity, waivers of citation and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company in their own proper persons." (Adopted October 7, 1981 - The Hanover Insurance Company; Adopted April 14, 1982 - Massachusetts Bay Insurance Company; Adopted September 7, 2001 - Citizens Insurance Company of America)

IN WITNESS WHEREOF, THE HANOVER INSURANCE COMPANY, MASSACHUSETTS BAY INSURANCE COMPANY and CITIZENS INSURANCE COMPANY OF AMERICA have caused these presents to be sealed with their respective corporate seals, duly attested by two Vice Presidents, this 6th day of **October 2011**.



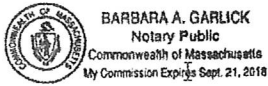
**THE HANOVER INSURANCE COMPANY  
MASSACHUSETTS BAY INSURANCE COMPANY  
CITIZENS INSURANCE COMPANY OF AMERICA**

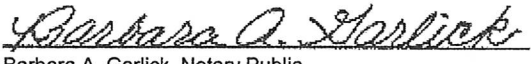
  
\_\_\_\_\_  
Robert Thomas, Vice President

  
\_\_\_\_\_  
Mary Fitzgerald, Vice President

THE COMMONWEALTH OF MASSACHUSETTS )  
COUNTY OF WORCESTER ) ss.

On this 6th day of **October 2011** before me came the above named Vice Presidents of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, to me personally known to be the individuals and officers described herein, and acknowledged that the seals affixed to the preceding instrument are the corporate seals of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, respectively, and that the said corporate seals and their signatures as officers were duly affixed and subscribed to said instrument by the authority and direction of said Corporations.



  
\_\_\_\_\_  
Barbara A. Garlick, Notary Public  
My Commission Expires September 21, 2018


I, the undersigned Vice President of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, hereby certify that the above and foregoing is a full, true and correct copy of the Original Power of Attorney issued by said Companies, and do hereby further certify that the said Powers of Attorney are still in force and effect.

This Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America.

"RESOLVED, That any and all Powers of Attorney and Certified Copies of such Powers of Attorney and certification in respect thereto, granted and executed by the President or any Vice President in conjunction with any Vice President of the Company, shall be binding on the Company to the same extent as if all signatures therein were manually affixed, even though one or more of any such signatures thereon may be facsimile." (Adopted October 7, 1981 - The Hanover Insurance Company; Adopted April 14, 1982 - Massachusetts Bay Insurance Company; Adopted September 7, 2001 - Citizens Insurance Company of America)

GIVEN under my hand and the seals of said Companies, at Worcester, Massachusetts, this 26th day of **January** 2018 .

**THE HANOVER INSURANCE COMPANY  
MASSACHUSETTS BAY INSURANCE COMPANY  
CITIZENS INSURANCE COMPANY OF AMERICA**

  
\_\_\_\_\_  
Glenn Margosian, Vice President

**Project:** RG TOWERS

**Subject:** Review Comments

**To:** Brandon Creagan

**From:** Rod Reed, County Surveyor  
PW-Engineering Division

**Date:** January 10, 2018

All comments are based on the Standards of Practice per 5J-17.050 thru 5J-17.052

**SURVEY:**

- 1) Please provide a signed and sealed survey.
- 2) Please add to the notes. "The expected use of the survey and map" and "All measurements are in accordance with the United States standard, in feet."
- 3) Please add the following statement to your notes "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."
- 4) All survey maps must reflect a survey date, which is the date of data acquisition.
- 5) A reference to all bearings shown on a survey map or report must be clearly stated, i.e., whether to "True North"; "Grid North as established by the NOS"; "Assumed North based on a bearing for a well-defined line, such as the center line of a road or right of way, etc."; "a Deed Call for a particular line"; or "the bearing of a particular line shown upon a plat." References to Magnetic North should be avoided except in the cases where a comparison is necessitated by a Deed Call. In all cases, the bearings used shall be referenced to some well-established and monumented line.

Please provide a written response to all comments

**Rod Reed, County Surveyor**  
St. Lucie County, Fl.  
2300 Virginia Avenue  
Ft. Pierce, Fl. 34982-5652  
www.stlucieco.org  
Ph. (772) 462-1721  
E-mail reedr@stlucieco.org



January 18, 2018

RG Towers (Holly Valdez)  
2141 Alternate A1A Suite 440  
Jupiter, FL 33477

**SUBJECT: RG Towers – 2006 Orange Ave**  
**TECHNICAL REVIEW PROJECT: # 17-04000033**  
**SITE PLAN AND DESIGN REVIEW**

**Comments:**

1. Extend the landscape buffer that will be around the fenced area to include the southern portion of the vehicular use area to the proposed sidewalk.
2. Submit an Irrigation Plan as well as provide clarification on the water schedule that was provided. Currently the water schedule shows the plants being maintained for 90 days. What will happen after the 90s have passed?
3. Provide a Tower Removal Bond & Agreement
4. Detail how vehicles will enter and exit the site. Is there ability for a vehicle to turn around in the driveway or will they have to back into the street?
5. Camouflaging options should be looked into as well as a slim pole design to reduce visibility of the pole and to help it blend in more with its surroundings.
- 6.

**Advisory Comment:**

1. Look into the possibility of buffering the north property line from the adjacent ally way and residential home. This can be done by installing a 6 foot landscape buffer or a 6ft wood fence.

The presented review is specific to the proposed facility. Please contact me should you have any questions regarding the project at (772) 467-3742 or by e-mail: [bcreagan@city-ftpierce.com](mailto:bcreagan@city-ftpierce.com).

Sincerely,

Brandon Creagan, LEED Green Associate  
Planner



**TO : Brandon Creagan, Planner**

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

**RE : RG Towers - 2006 Orange Avenue – Conditional Use  
TRC No. 17-04000033**

**DATE : January 18, 2018**

This is to advise you that we have completed the review of the following documents as received by this office on January 5, 2018:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Application Package                                   | <input type="checkbox"/> P/D Drawings & Approved Site Plan                       |
| <input type="checkbox"/> Test Reports & Related Documents                                 | <input type="checkbox"/> Certificate of Completion                               |
| <input type="checkbox"/> Record Drawings  | <input type="checkbox"/> Permits from applicable Local, State & Federal Agencies |
| <input type="checkbox"/> Clearances from all applicable Local, State and Federal Agencies |  |

Based on our reviews and appropriate site final inspection, we

- |  |   |                              |
|--|---|------------------------------|
| <input checked="" type="checkbox"/> Recommend                              | <input type="checkbox"/> Do Not Recommend |                              |
| <input checked="" type="checkbox"/> Conditional Use Approval w/ conditions | <input type="checkbox"/> Building Permit  | <input type="checkbox"/> C/O |

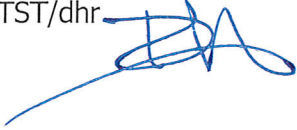
Developer, Owner, Engineer, Contractor and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for 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 conditions of approval

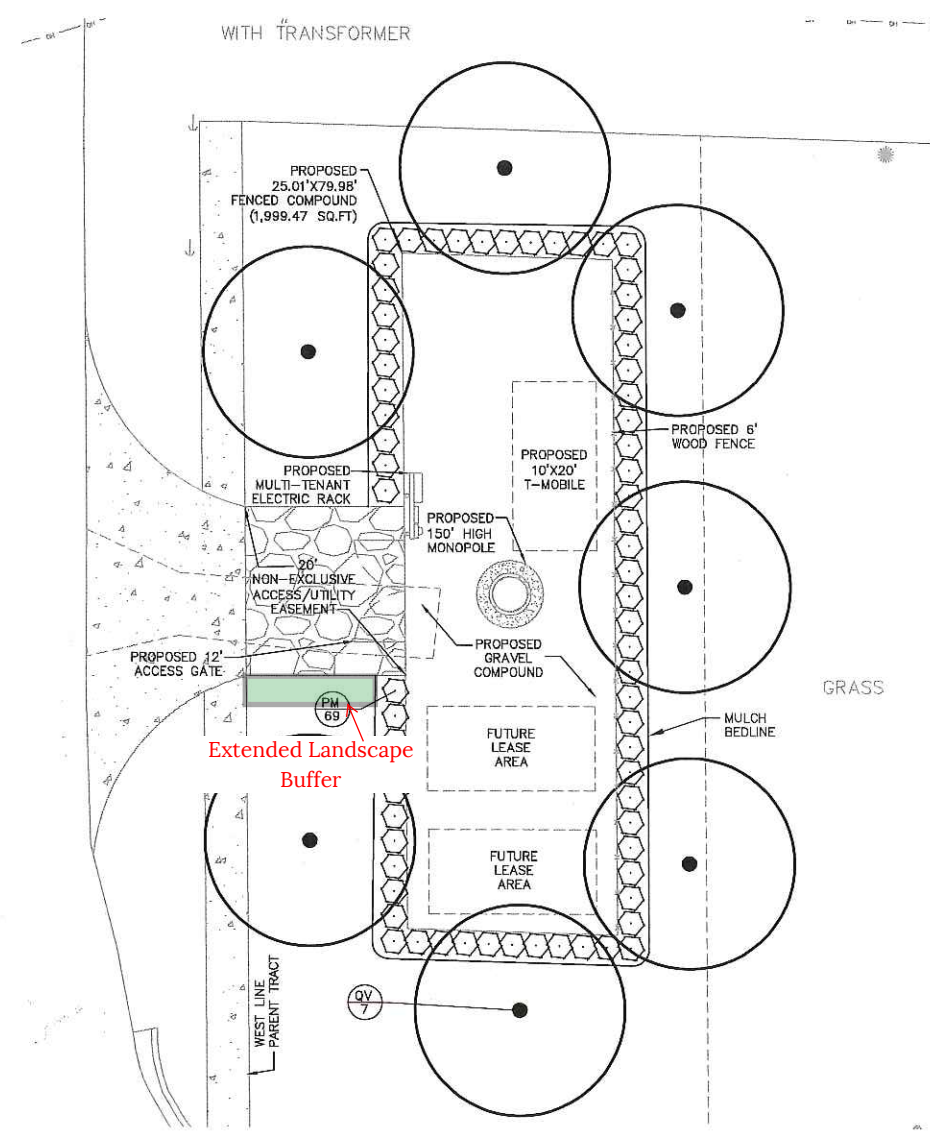
ENGINEERING CONDITIONS OF APPROVAL:

1. Please reduce the driveway radius to a maximum of 10'.
2. Sheet 2 of 5 does not scale accurately; please confirm graphic scale and update plan accordingly.

JRA/TST/dhr

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the left.

Drawing name: K:\WPB\_CVA\CELL\_SITES\PROP\_Tower\144042047 FT. Pierce - 2006 Orange Ave\land\zba\LI.DWG L1 - LANDSCAPE PLANS Nov 14, 2017 8:28pm by: markmerritt



**LANDSCAPE WATERING SPECIFICATIONS AND NOTES**

- A. WATER-SOLUBLE GEL SOIL AMENDMENT**
1. ALL PLANTINGS SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, WITH POLYMER GEL SLURRY (AS DESCRIBED IN THESE SPECIFICATIONS), UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.
  2. A WATER-ABSORBING POLYMER GEL PRODUCT (AGRODIAMONDS (TM)) THAT HAS BEEN HYDRATED ACCORDING TO MANUFACTURER'S DIRECTION SHALL BE PLACED INTO EACH HOLE PRIOR TO PLANTING. SEE APPLICATION RATE CHART, THIS SHEET. AGRODIAMONDS (TM) BY AGROTECH AMERICA (561) 743-8025.
- B. WATER**
1. 90 DAYS OF WATER MONITORING SHALL BE SCHEDULED FOR ALL PLANTINGS UNDER THIS CONTRACT.
  2. IF SITE EXPERIENCES DROUGHT OR IF RAINFALL DOES NOT ACCUMULATE 2" PER WEEK DURING THE MONITORING PERIOD, HAND WATERING WILL BE NECESSARY.
  3. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER (MEETING THE ABOVE STANDARD) FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER. SUITABLE WATER MAY BE AVAILABLE IN THE ADJACENT CANAL - COORDINATE WITH OWNER FOR PERMISSIONS.
  4. WATERING PROJECT PLANTINGS MAY BE ACHIEVED BY WATER TRUCK OR BY TEMPORARY IRRIGATION SYSTEM, WHICH MUST BE REMOVED AT THE END OF THE MAINTENANCE PERIOD.
  5. CONTRACTOR SHALL SUPPLEMENT RAINFALL BY HAND-WATERING AND DOCUMENT WATERING EFFORTS THROUGH RAINFALL DATA AND MONITORING RECORDS. FOR BIDDING PURPOSES, FOLLOW THE SCHEDULE BELOW:
- DAY 1: WATER IN PLANTINGS PER SPECS.  
 DAY 2-30: 1/2" OF WATER EACH DAY FOR MON, WED, SATURDAY  
 DAY 31-90: 1/2" OF WATER EACH DAY FOR MON, SATURDAY

- C. FERTILIZER**
- CONTRACTOR SHALL INCLUDE FERTILIZER IN HYDRATED GEL SLURRY MIX. FERTILIZER SHALL BE A WATER SOLUBLE 14-14-14, CONTROLLED-RELEASE TYPE. MIX WITH GEL AT A RATE OF ONE OUNCE PER PLANT. ESTIMATE PLANT QUANTITIES FOR GEL PRODUCT AND MIX FERTILIZER APPROPRIATELY.
- SIX WEEKS AFTER PLANTING, BROADCAST 10-10-10 CONTROLLED-RELEASE FERTILIZER AT A RATE OF 400 LBS PER ACRE OVER THE ENTIRE PLANTED AREA.

AGRODIAMONDS (TM) APPLICATION RATE CHART

CONTAINER SIZE	AGRODIAMONDS (TM) (RAW PRODUCT)
30 GAL	8 CUPS (46 OZ)
7 GAL	2 CUPS (11.5 OZ)

\*MIX INTO BACKFILL MATERIAL FOR PLANT PITS. WORK MIX INTO SOIL WITH SHOVEL/SPADE.  
 \*AGRODIAMONDS (TM) MUST BE HYDRATED (WATER-IN) FROM TOP. DO NOT WATER BY INJECTION (SUBSURFACE).  
 \*MIX FERTILIZER IN HOLE PRIOR TO WATERING.

- PLANTING NOTES:**
1. CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES AND ALL CONTRACT DOCUMENTS FOR FURTHER AND COMPLETE INSTRUCTIONS.
  2. PLANT LIST QUANTITIES ARE PROVIDED FOR CONVENIENCE. IN THE EVENT OF QUANTITY DISCREPANCIES THE DRAWING SHALL TAKE PRECEDENCE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING.
  3. PLANT SIZES LISTED ARE THE MINIMUM SIZE THAT WILL BE ACCEPTED FOR THAT PLANT.
  4. ANY SUBSTITUTION IN SIZE AND/OR PLANT MATERIAL MUST BE APPROVED BY THE LANDSCAPE ARCHITECT IN WRITING. ALL PLANTS WILL BE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT AND/OR OWNERS REPRESENTATIVE BEFORE PLANTING CAN BEGIN.
  5. CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES AND/OR INTERFERE WITH EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
  6. THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING OF SOILS, AMENDMENTS, ETC. ASSOCIATED WITH THE WORK AND INCLUDED IN THE SPECIFICATIONS.
  7. CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LIMITS OF WORK AND EXISTING CONDITIONS AND VERIFY ALL INFORMATION. IF DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IN WRITING WITHIN SEVEN CALENDAR DAYS OF NOTICE TO PROCEED.

**PLANT SCHEDULE**

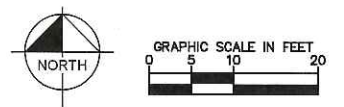
TREES	BOTANICAL NAME	COMMON NAME	CONT.	GAL.	SIZE	QTY
QV	Quercus virginiana	Southern Live Oak	30 gal	3" Cal.	10'HT X 5'SPR	7

SHRUBS	BOTANICAL NAME	COMMON NAME	CONT.	O.C.	SIZE	QTY
PM	Podocarpus macrophyllus	Podocarpus	7 gal	36" O.C.	6'H Min	69

**CODE COMPLIANCE SUMMARY:**

PERIMETER BUFFER REQUIRED: SHADE TREES 1/30 LF 193 LF / 30 LF CONTINUOUS HEDGE 6' H	PROVIDED: 7 SHADE TREES CONTINUOUS HEDGE 6' H
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This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Name of and location of the project shall be stated without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

RG Towers, LLC  
 2141 Alternate A1A South, Suite 440  
 Jupiter, FL 33477

PROJECT INFORMATION:  
 FT PIERCE-ORANGE AVE  
 2006 ORANGE AVE  
 FORT PIERCE, FL 34950  
 ST LUCIE COUNTY

CURRENT ISSUE DATE:  
 NOVEMBER 2017

ISSUED FOR:  
 SITE PLAN REVIEW

REV.: DATE: DESCRIPTION:



PLANS PREPARED BY:  
**Kimley-Horn**  
 © 2017 KIMLEY-HORN AND ASSOCIATES, INC.  
 1920 WEKIVA WAY, SUITE 200  
 WEST PALM BEACH, FLORIDA 33411  
 (561) 845-0665  
 FBPE CA00000895

PROVIDER:

DRAWN BY: CHK.: APV.:  
 MM LF MM

LICENSURE:  
 TRICIA C. RICHTER, PLA LA#6667244

SHEET TITLE:  
 LANDSCAPE PLANS

SHEET NUMBER: REVISION:  
**4/5**

KHA Job #:  
 144042047



**RG Towers, LLC**

Ft Pierce Planning and Zoning  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

1/29/18

**RE: TRC Comments Response RG Towers - Ft Pierce- Orange Ave**

Attached please find the following documents (**one original and thirteen copies and one CD**) to complete our response for a new communication tower per the code Sec. 22-159 (B) - Antenna support structure

- (1) Written Response
- (2) Written Response- survey
- (3) (13) 24 x 36 Site and landscape plan- revised
- (4) (13) 24 x 36 Survey revised
- (5) Removal Bond with Tower removal estimate

We look forward to being heard by Planning and Zoning on February 13, 2018

Please let me know if you have any questions.

Sincerely,

Holly Valdez  
RG Towers, LLC  
V.P. Operations

Ft Pierce Planning and Zoning  
100 N. U.S. Highway 1  
Fort Pierce, FL 34950

1/29/18

**RE: TRC Comments Response RG Towers - Ft Pierce- Orange Ave  
Project: # 17-04000033**

All comments are based on the Standards of Practice per 5J-17.050 thru 5J-17.052

**SURVEY:**

- 1) Please provide a signed and sealed survey.
- 2) Please add to the notes. "The expected use of the survey and map" and "All measurements are in accordance with the United States standard, in feet."
- 3) Please add the following statement to your notes "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."
- 4) All survey maps must reflect a survey date, which is the date of data acquisition.
- 5) A reference to all bearings shown on a survey map or report must be clearly stated, i.e., whether to "True North"; "Grid North as established by the NOS"; "Assumed North based on a bearing for a well-defined line, such as the center line of a road or right of way, etc."; "a Deed Call for a particular line"; or "the bearing of a particular line shown upon a plat." References to Magnetic North should be avoided except in the cases where a comparison is necessitated by a Deed Call. In all cases, the bearings used shall be referenced to some well-established and monumented line.  
**Please see separate written response from surveyor attached**

**SITE PLAN AND DESIGN REVIEW:**

1. Extend the landscape buffer that will be around the fenced area to include the southern portion of the vehicular use area to the proposed sidewalk.  
**Please see revised Page 4/5**
2. Submit an Irrigation Plan as well as provide clarification on the water schedule that was provided. Currently the water schedule shows the plants being maintained for 90 days. What will happen after the 90s have passed?  
**Irrigation plan as described on page 4/5 (below) constitutes the plan for the first 90 days giving the native plants time to root and acclimate. RG Towers is committed to continual landscape maintenance at their own expense. Perpetual maintenance includes pruning, fertilizing, replacement of dead and dying plants, and alternate watering of landscape materials during periods of drought in order to maintain healthy plant material.**

B. WATER

1. 90 DAYS OF WATER MONITORING SHALL BE SCHEDULED FOR ALL PLANTINGS UNDER THIS CONTRACT.
2. IF SITE EXPERIENCES DROUGHT OR IF RAINFALL DOES NOT ACCUMULATE 2" PER WEEK DURING THE MONITORING PERIOD, HAND WATERING WILL BE NECESSARY.
3. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER (MEETING THE ABOVE STANDARD) FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER. SUITABLE WATER MAY BE AVAILABLE IN THE ADJACENT CANAL - COORDINATE WITH OWNER FOR PERMISSIONS.
4. WATERING PROJECT PLANTINGS MAY BE ACHIEVED BY WATER TRUCK OR BY TEMPORARY IRRIGATION SYSTEM, WHICH MUST BE REMOVED AT THE END OF THE MAINTENANCE PERIOD.
5. CONTRACTOR SHALL SUPPLEMENT RAINFALL BY HAND-WATERING AND DOCUMENT WATERING EFFORTS THROUGH RAINFALL DATA AND MONITORING RECORDS.
6. FOR BIDDING PURPOSES, FOLLOW THE SCHEDULE BELOW:  
  
DAY 1: WATER IN PLANTINGS PER SPECS.  
DAY 2-30: 1/2" OF WATER EACH DAY FOR MON, TUES, WED, THURS, SATURDAY  
DAY 31-90: 1/2" OF WATER EACH DAY FOR MON, WED, SATURDAY

3. Provide a Tower Removal Bond & Agreement

Please see attached

4. Detail how vehicles will enter and exit the site. Is there ability for a vehicle to turn around in the driveway or will they have to back into the street?

Aside from initial construction, vehicular traffic at the site will consist of one average size vehicle or pickup truck accessing the site at a time for service and/or maintenance. As such, no turnaround will be necessary. Vehicles will simply enter head in and back out onto 21<sup>st</sup> St to exit.

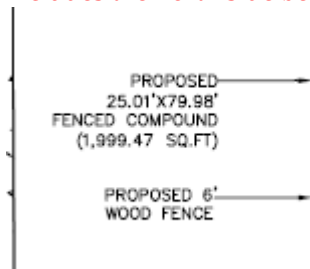
5. Camouflaging options should be looked into as well as a slim pole design to reduce visibility of the pole and to help it blend in more with its surroundings.

The design has been revised to show a slimpole versus a monopole

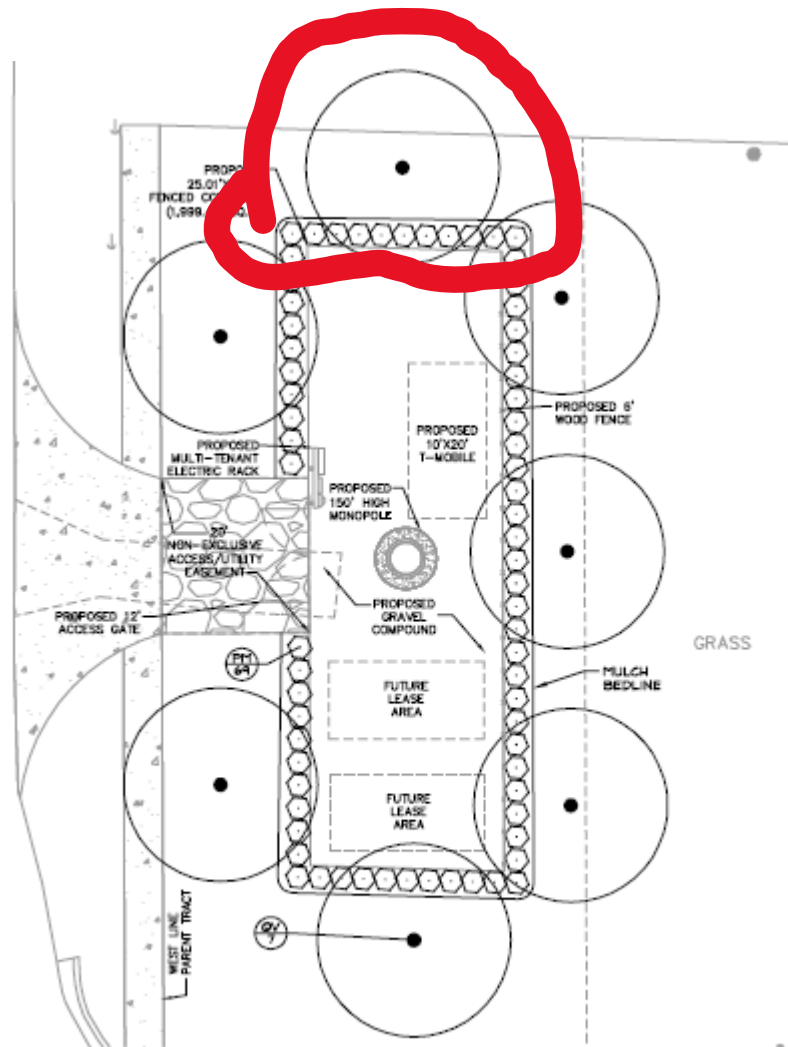
Advisory Comment:

1. Look into the possibility of buffering the north property line from the adjacent ally way and residential home. This can be done by installing a 6 foot landscape buffer or a 6ft wood fence.

On Page 2/5 a 6' wooden fence is depicted to enclose the entire compound which includes the north side between the compound and the residential parcel to the north.



And on Page 4/5 a landscape buffer is already shown on the north side which consists of (11) 6 foot high podocarpus plants and (1) 10 foot live southern Oak with a five foot spread



ANT SCHEDULE

ENGINEERING CONDITIONS OF APPROVAL:

1. Please reduce the driveway radius to a maximum of 10'.  
Revision has been made
2. Sheet 2 of 5 does not scale accurately; please confirm graphic scale and update plan accordingly.  
Revision has been made

# ***WSP Consultants, Inc.***

## **Surveyors & Mappers**

18815 Annelis Drive  
Lutz, FL 33548  
Phone: (813) 909-2420

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January 24, 2018

### **RESPONSE LETTER**

Rod Reed, County Surveyor  
St. Lucie County, Florida  
2300 Virginia Avenue  
Fort Pierce, FL 34982-5652

### **WSP PROJECT # 17-1404 RG TOWERS - ORANGE AVENUE**

Please consider the following responses to the review comments provided by your office dated January 10, 2018.

1) *Please provide a signed and sealed survey.*

- Signed and sealed surveys are provided as part of the re-submittal.

2) *Please add to the notes. "The expected use of the survey and map" and "All measurements are in accordance with the United States standard, in feet."*

- Note # 4 in the Report of Survey addresses the "expected use".
- Note # 6 in the Report of Survey addresses the "measurement units".

3) *Please add the following statement to your notes "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."*

- Note # 19 in the Report of Survey addresses this comment.

4) *All survey maps must reflect a survey date, which is the date of data acquisition.*

- Note # 20 in the Report of Survey addresses this comment.

5) *A reference to all bearings shown on a survey map or report must be clearly stated, i.e., whether to "True North"; "Grid North as established by the NOS"; "Assumed North based on a bearing for a well-defined line, such as the center line of a road or right of way, etc."; "a Deed Call for a particular line"; or "the bearing of a particular line shown upon a plat." References to Magnetic North should be avoided except in the cases where a comparison is necessitated by a Deed Call. In all cases, the bearings used shall be referenced to some well-established and monumented line.*

- Bearing Note added to the Map of Survey (to the right of the North Arrow).

Sincerely,



**William S. Payne, PSM**  
**WSP Consultants, Inc.**