

FL-101 BELLA TERRA 178' AGL MONOPOLE

Broadus Towers, LLC

Case #: DCI2023-E002

Village Council – 05/01/2024

AERIALS AND ZONING MAPS

Mattaniah S. Jahn





BEN HILL GREENWAY

CORKSCREW RD

ALCO RD

75

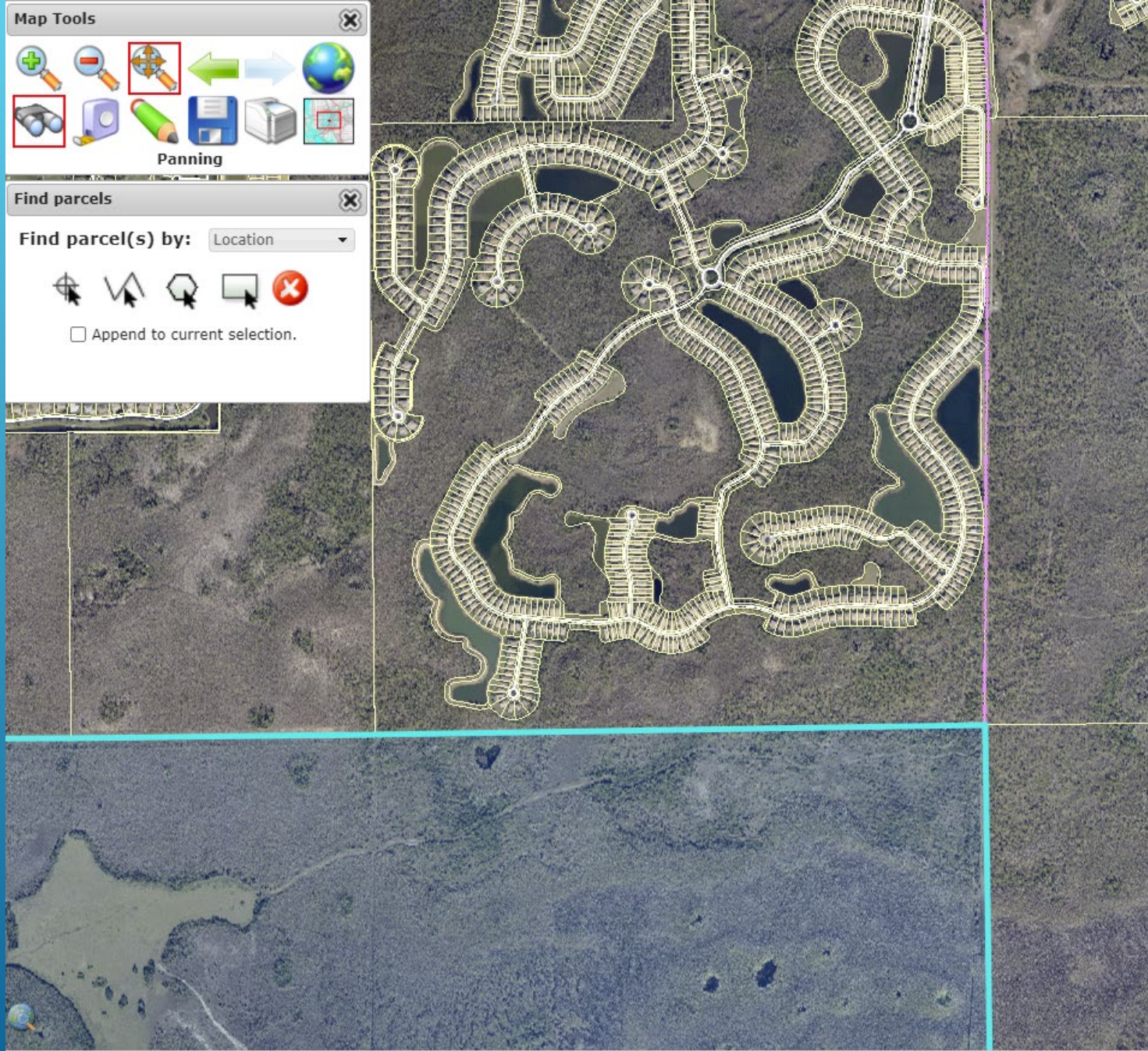
Map Tools

Panning

Find parcels

Find parcel(s) by: Location

Append to current selection.



STRAP	Folio	Owner Name	Site Address	Last Trans. Date	Last Tr
07-47-26-00-00001.0000	10610494	LEE COUNTY	ACCESS UNDETERMINED, BONITA SPR...	-	

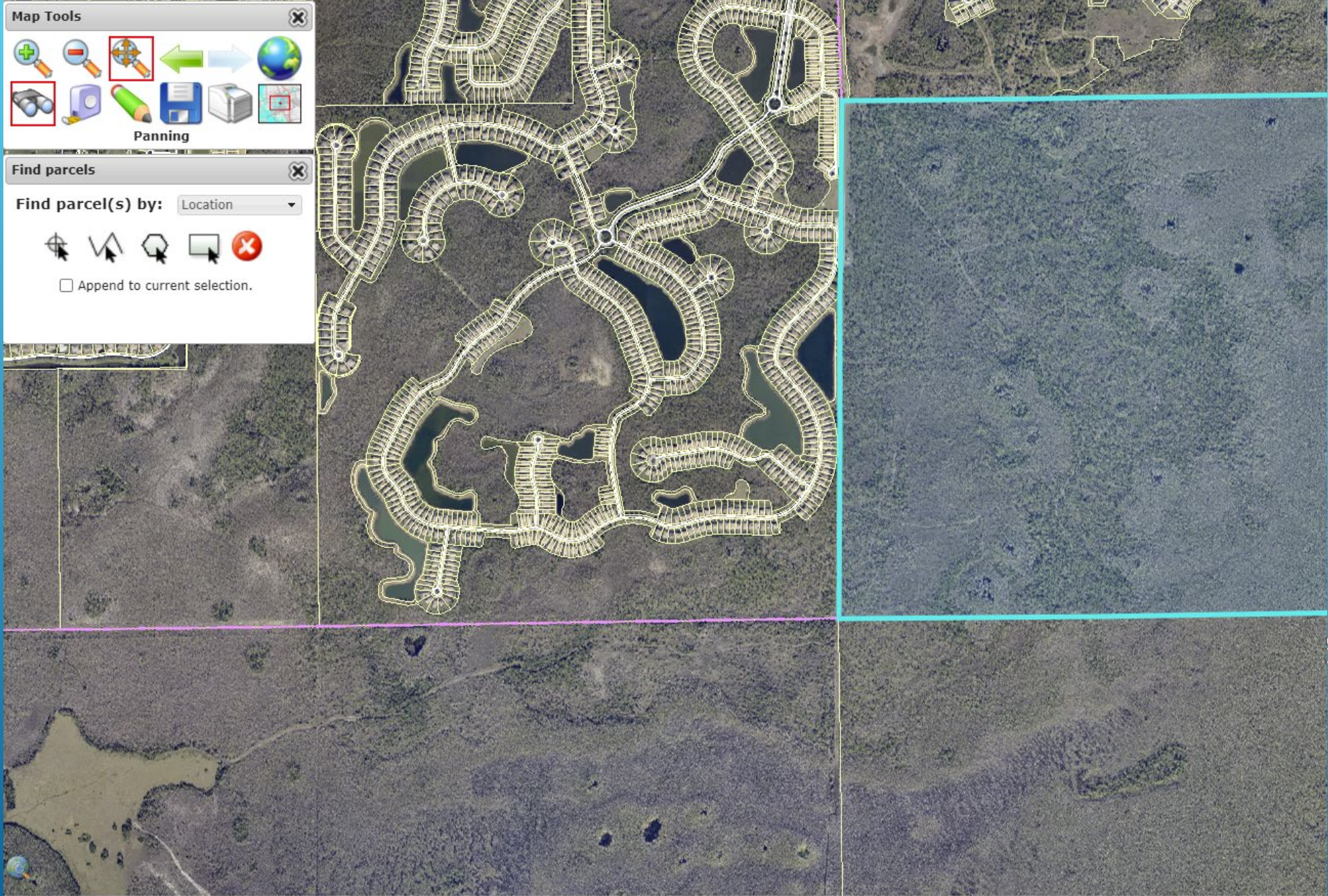
Map Tools

Panning

Find parcels

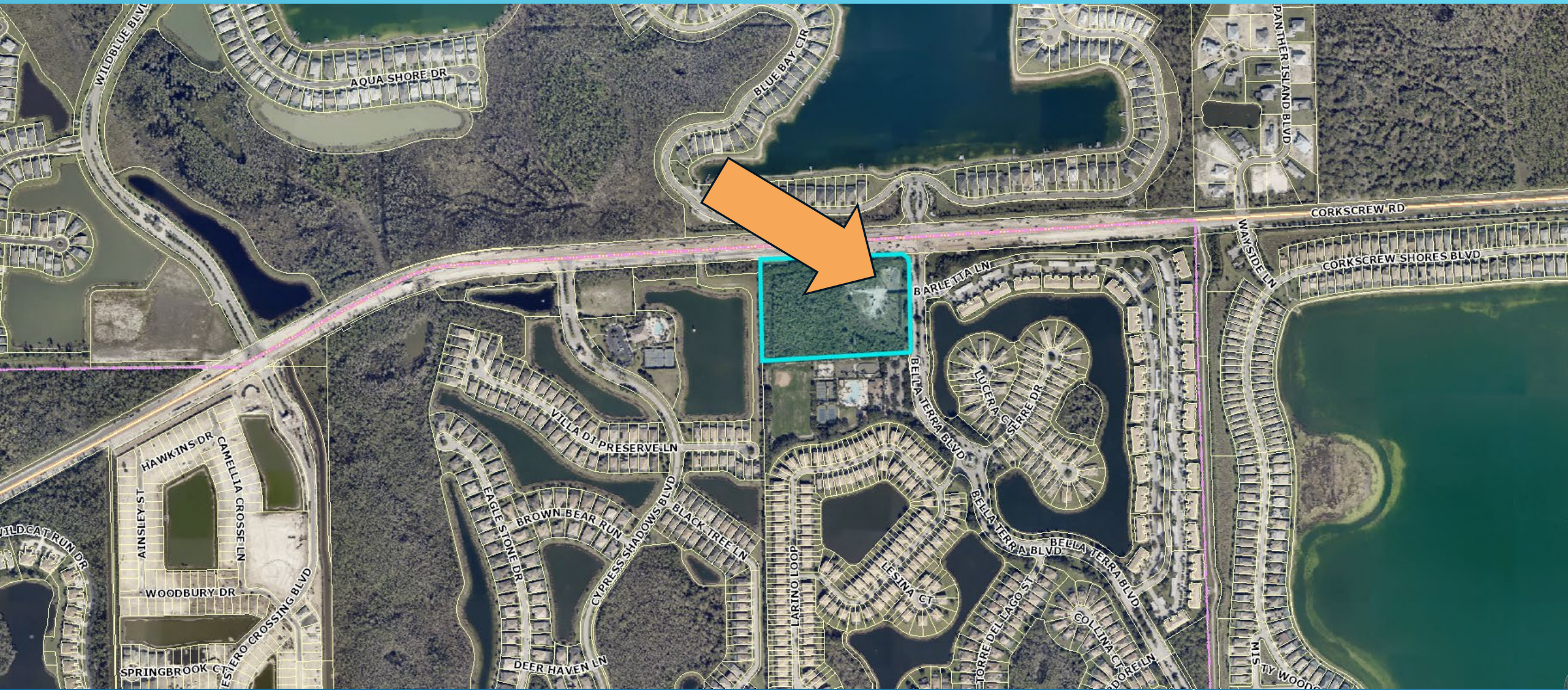
Find parcel(s) by: Location

Append to current selection.

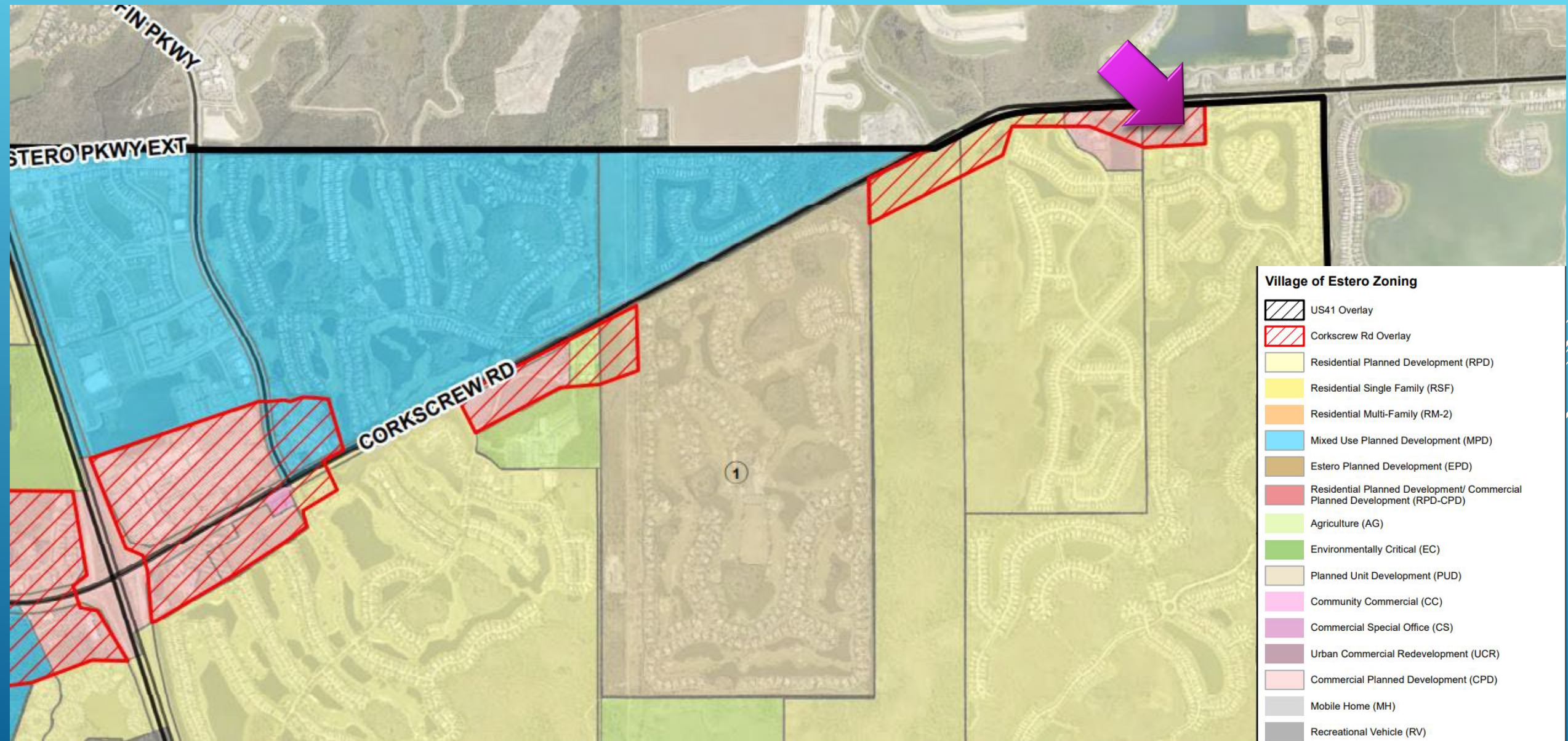


STRAP	Folio	Owner Name	Site Address	Last Trans. Date	Last Trans. Amt	Just Value	Taxable Value
33-46-26-00-00001.0000	10352119	LEE COUNTY	ACCESS UNDETERMINED, ESTERO	12-1992	\$ 2,244,800	\$ 3,161,150	\$ 0



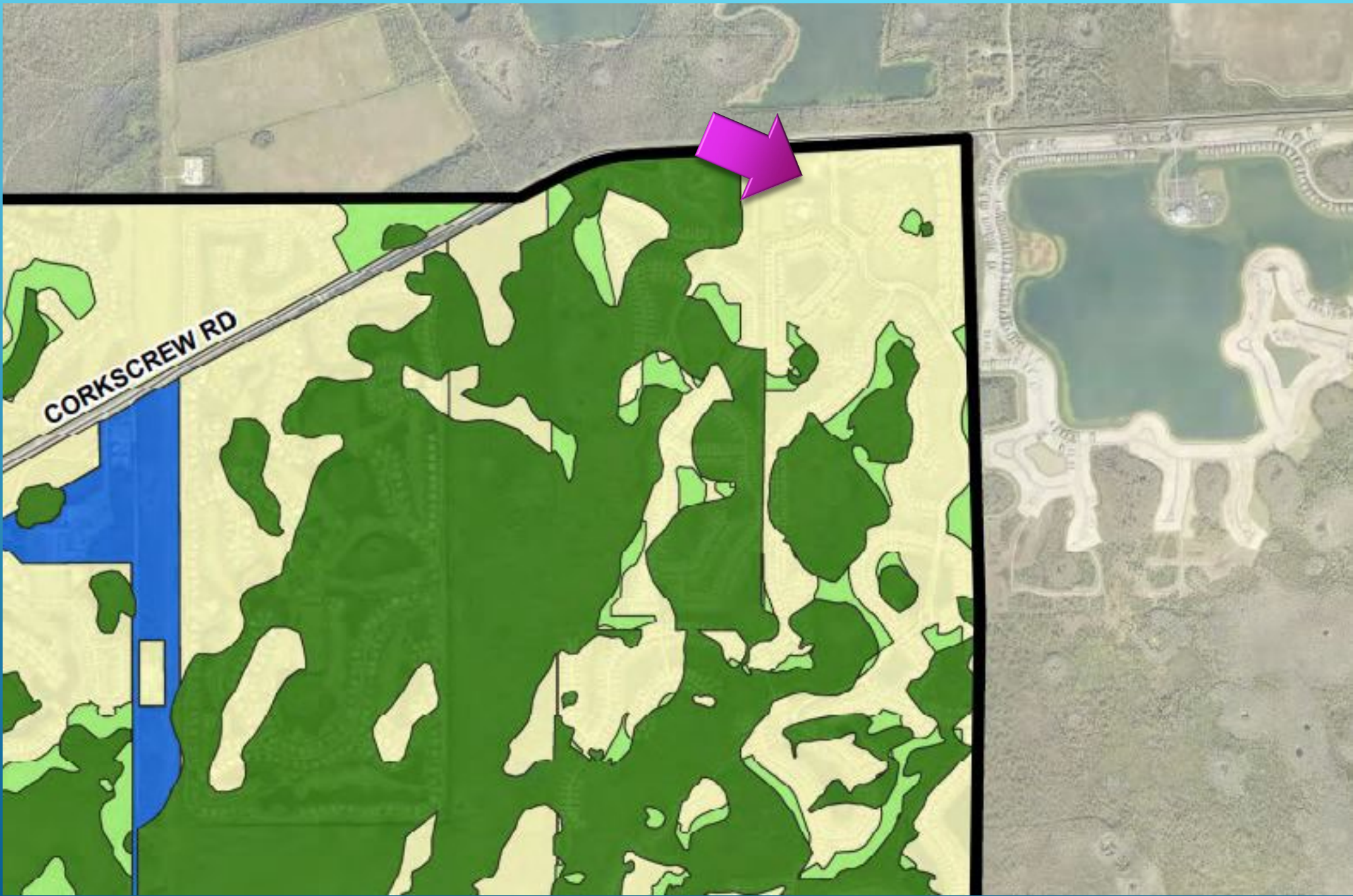






Village of Estero Zoning

	US41 Overlay
	Corkscrew Rd Overlay
	Residential Planned Development (RPD)
	Residential Single Family (RSF)
	Residential Multi-Family (RM-2)
	Mixed Use Planned Development (MPD)
	Estero Planned Development (EPD)
	Residential Planned Development/ Commercial Planned Development (RPD-CPD)
	Agriculture (AG)
	Environmentally Critical (EC)
	Planned Unit Development (PUD)
	Community Commercial (CC)
	Commercial Special Office (CS)
	Urban Commercial Redevelopment (UCR)
	Commercial Planned Development (CPD)
	Mobile Home (MH)
	Recreational Vehicle (RV)
	Parks & Community Facilities (PCF)
	Community Facilities Planned Development (CFPD)



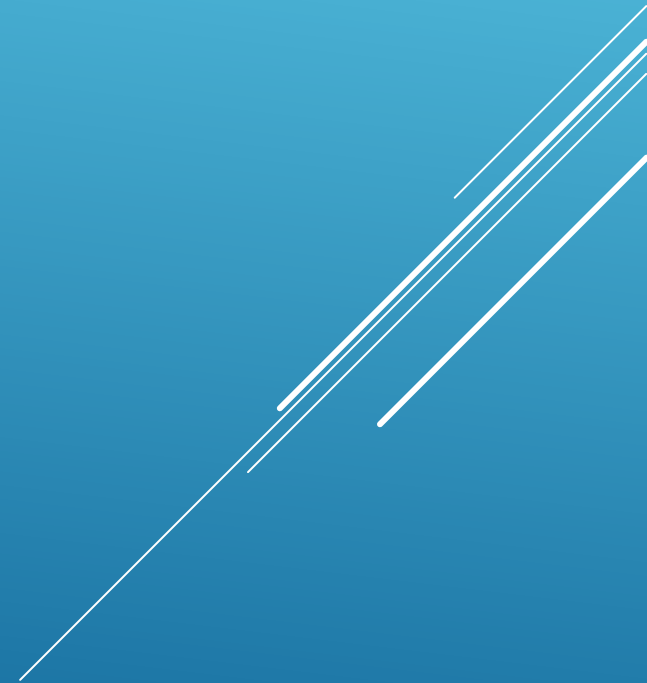
Legend

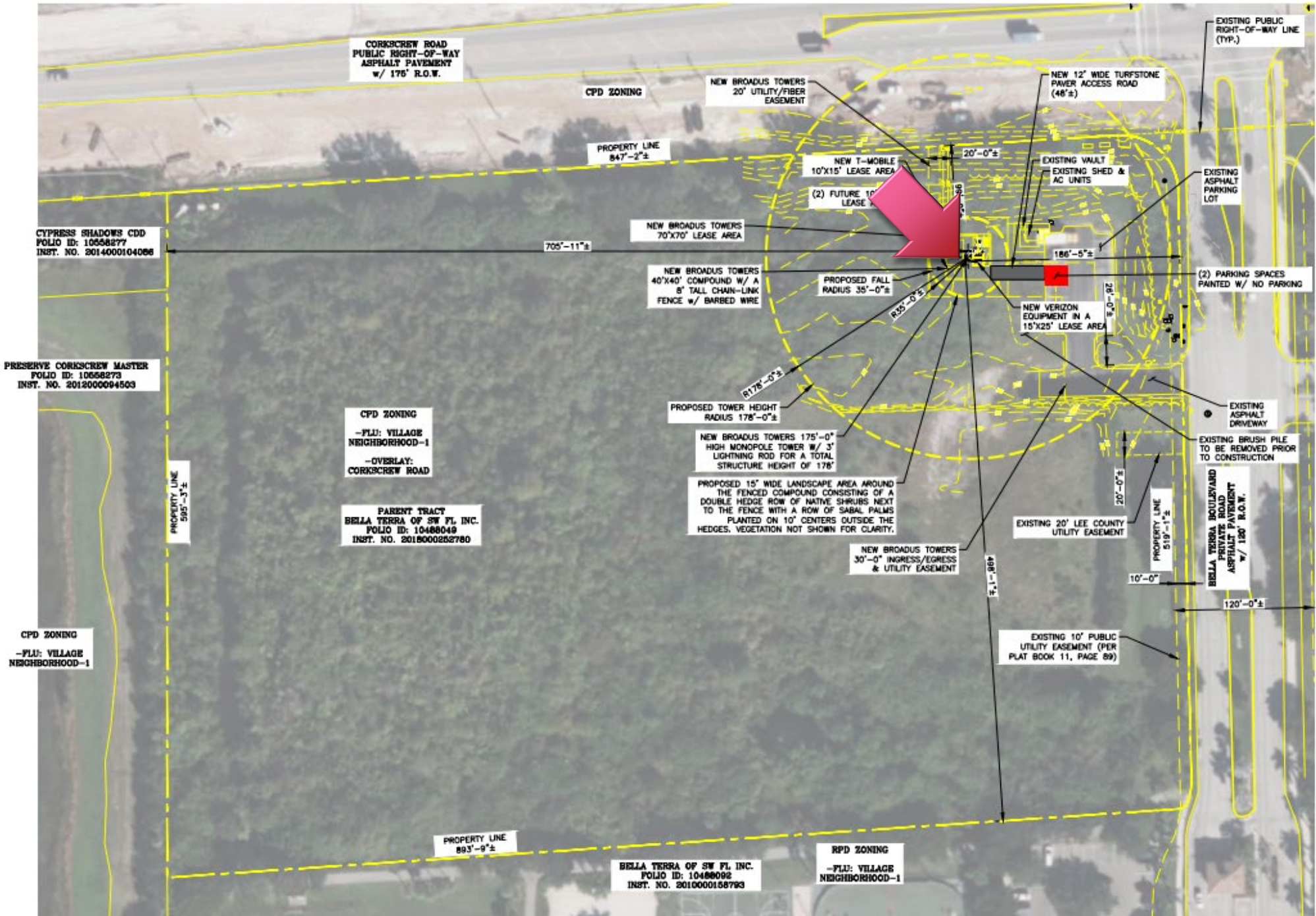
-  Village of Estero
-  Wetlands
-  Conservation
-  Urban Commercial
-  Transitional Mixed Use
-  Public Parks and Recreation
-  Public Facilities
-  Village Center
-  Village Neighborhood 2
-  Village Neighborhood 1
-  Rivers and Creeks
-  Major Roads
-  Railway

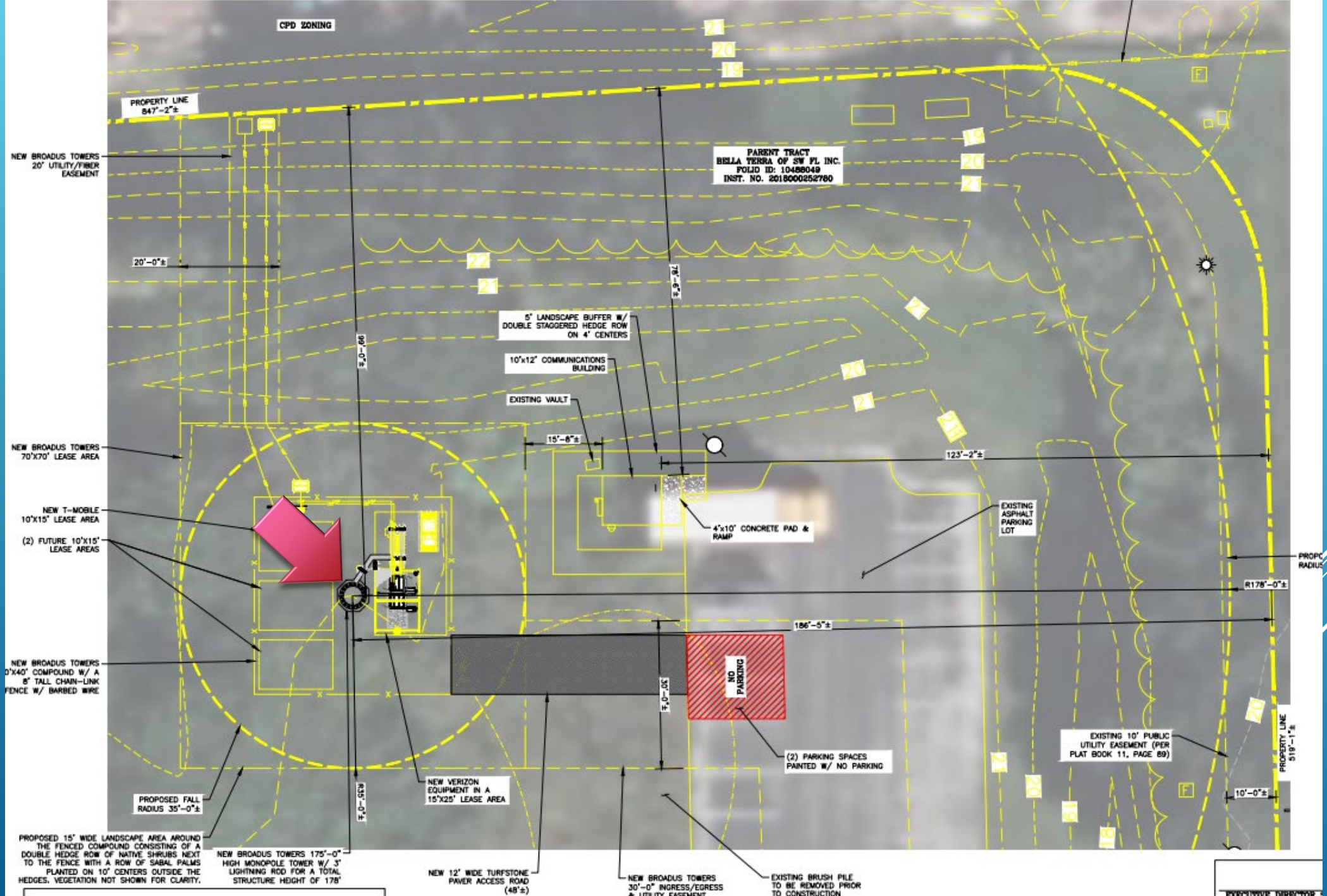
EXAMPLES AND SELECT PLAN SHEETS

Mattaniah S. Jahn

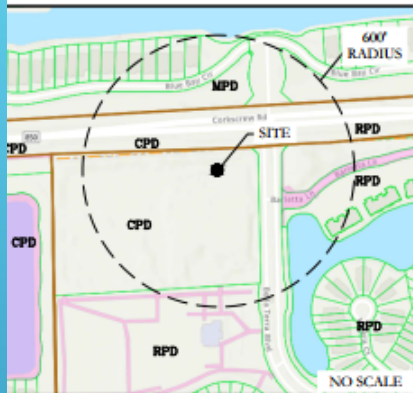








ZONING MAP



CYPRESS SHADOWS CDD
 FOLIO ID: 10668277
 INST. NO. 2014000104086

CONTRACTOR TO INSTALL THE FOLLOWING SIGNS AT ALL DATES:
 - ALL-WEATHER EMERGENCY INFORMATION
 - SITE ADDRESS AND 24-HOUR EMERGENCY CONTACT PHONE NUMBER.
 - FCC REGISTRATION SIGN.

NOTE:
 NO OTHER SIGNS, INCLUDING COMMERCIAL ADVERTISING, SHALL BE PERMITTED EXCEPT FOR SIGNS REQUIRED BY LAW.

FLOOD NOTE:
 BY GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY APPEARS TO LIE IN NO SPECIAL FLOOD HAZARD AREAS OF THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 12071C0625F, A NON-PRINTED PANEL.

COMPOUND SETBACK TABLE		
DIRECTION FROM EDGE OF COMPOUND TO BOUNDARY LINE	LENGTH	MIN. REQUIRED SETBACK
N	77'-10"±	25'-0"
S	476'-10"±	15'-0"
E	165'-11"±	25'-0"
W	685'-11"±	15'-0"

PRESERVE CORKSREW MASTER
 FOLIO ID: 10558273
 INST. NO. 2012000094503

CPD ZONING
 -PLU: VILLAGE NEIGHBORHOOD-1
 -OVERLAY: CORKSREW ROAD

PARENT TRACT
 BELLA TERRA OF SW FL INC.
 FOLIO ID: 10488048
 INST. NO. 2018000252780

CPD ZONING
 -PLU: VILLAGE NEIGHBORHOOD-1

CORKSREW ROAD
 PUBLIC RIGHT-OF-WAY
 ASPHALT PAVEMENT
 w/ 175' R.O.W.

CPD ZONING

PROPERTY LINE
 847'-2"±

685'-11"±

NEW BROADUS TOWERS
 70'X70' LEASE AREA

NEW BROADUS TOWERS
 40'X40' COMPOUND W/ A
 8' TALL CHAIN-LINK
 FENCE w/ BARBED WIRE

NEW T-MOBILE 10'X11'
 LEASE AREA
 (2) FUTURE LEASE

NEW SILT FENCE

PROPOSED FALL
 RADIUS 35'-0"±

PROPOSED TOWER HEIGHT
 RADIUS 178'-0"±

NEW BROADUS TOWERS 175'-0"
 HIGH MONOPOLE TOWER w/ 3'
 LIGHTNING ROD FOR A TOTAL
 STRUCTURE HEIGHT OF 178'

PROPOSED 15' WIDE LANDSCAPE AREA AROUND
 THE FENCED COMPOUND CONSISTING OF A
 DOUBLE HEDGE ROW OF NATIVE SHRUBS NEXT
 TO THE FENCE WITH A ROW OF SABAL PALMS
 PLANTED ON 10' CENTERS OUTSIDE THE
 HEDGES. VEGETATION NOT SHOWN FOR CLARITY.

(E) CHAIN LINK FENCE
 TO BE REMOVED

NEW BROADUS TOWERS
 30'-0" INGRESS/EGRESS
 & UTILITY EASEMENT

NEW 12' WIDE TURFSTONE
 PAVED ACCESS ROAD
 (48"±)

EXISTING VAULT
 EXISTING SHED &
 AC UNITS

165'-11"±

10'-10"±

6'-10"±

1146'-5"±

NEW VERIZON
 EQUIPMENT IN A
 15'X25' LEASE AREA

EXISTING PUBLIC
 RIGHT-OF-WAY
 LINE (TYP.)

9620'± TO NEAREST TOWER
 (ASR# 1044752)

EXISTING ASPHALT
 PARKING LOT

BELLA TERRA BOULEVARD
 PRIVATE ROAD
 ASPHALT PAVEMENT
 w/ 120' R.O.W.

508'± TO RESIDENTIAL

EXISTING ASPHALT
 DRIVEWAY

EXISTING BRUSH PILE
 TO BE REMOVED PRIOR
 TO CONSTRUCTION

PROPERTY LINE
 519'-11"±

10'-0"

EXISTING 20' LEE COUNTY
 UTILITY EASEMENT

EXISTING 10' PUBLIC
 UTILITY EASEMENT (PER
 PLAT BOOK 11, PAGE 89)

PROPERTY LINE
 893'-9"±

BELLA TERRA OF SW FL INC.
 FOLIO ID: 10488098
 INST. NO. 2010000158793

RPD ZONING
 -PLU: VILLAGE NEIGHBORHOOD-1

1 OVERALL SITE PLAN

SCALE: 1" = 80'-0" (FULL SIZE)
 1" = 100'-0" (11x17)

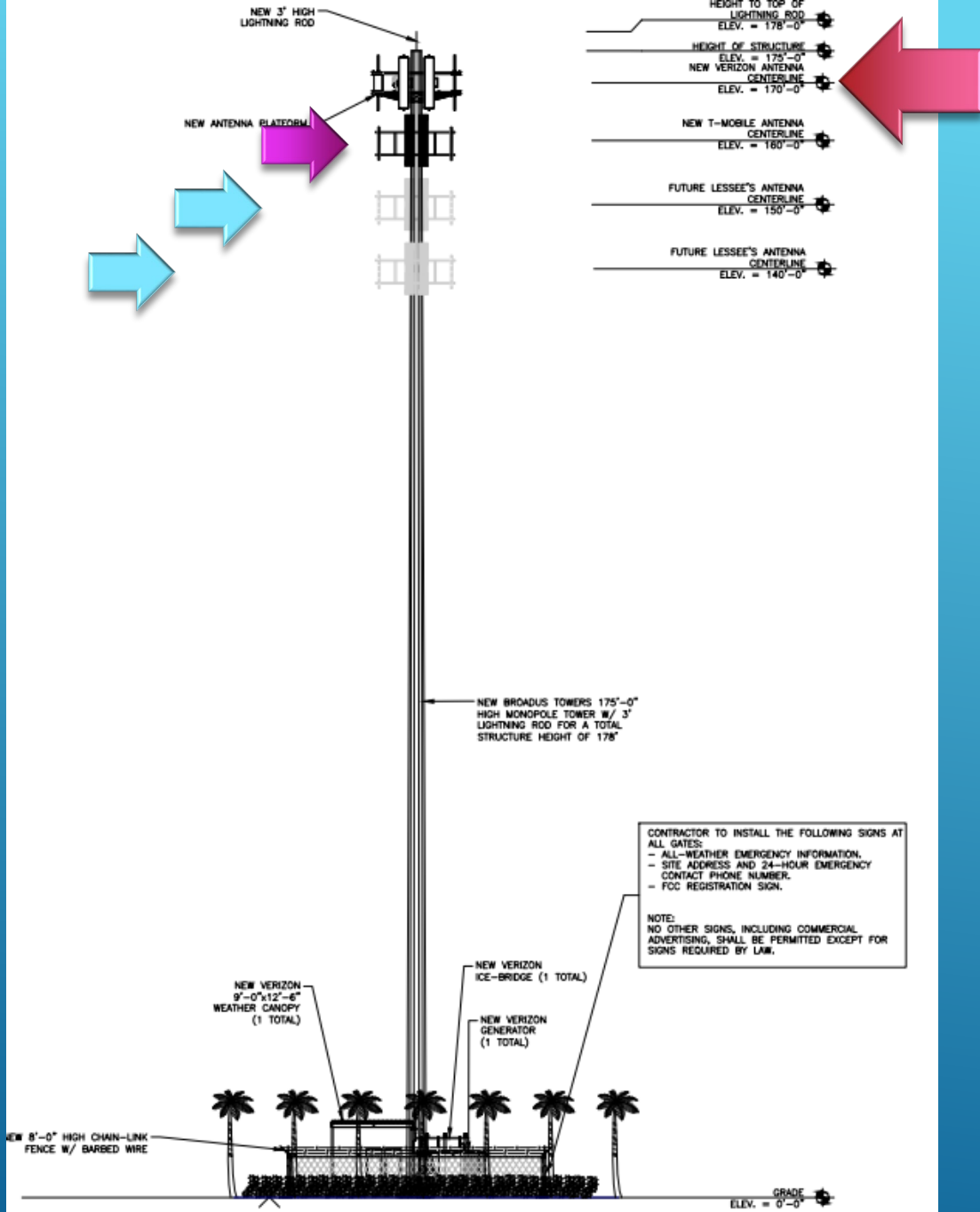


SUBJECT PARCEL (FROM TITLE)
 L OF TRACT C-1, BELLA TERRA UNIT ONE, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 77, PAGE 84, OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA.

7' X 70' LEASE AREA (AS-SURVEYED)
 being a portion of a certain tract of land as described and recorded in Instrument Number 2018000252780, in the Office of the County Recorder, and lying in the Southeast Quarter of Section 20, Township 46 South, Range 26 East, Lee County Florida, and being more particularly described as follows:
 commencing at a capped rebar (LB6690) found for the Southwest corner of the Southeast Quarter of said Section 46, and also being the Southwest corner of said certain tract of land, having Florida West State Plane Coordinates N: 769219.73
 743688.35; thence N 86°07'36" E, along the south line of said certain tract of land, a distance of 895.50 feet to a capped rebar (LB3664) found for the southeast corner of said certain tract of land, having Florida West State Plane Coordinates
 769280.22, E: 744581.80; thence N 26°13'58" W a distance of 503.51 feet to the POINT OF BEGINNING; thence N 00°00'00" W a distance of 70.00 feet to a point; thence N 90°00'00" E a distance of 70.00 feet to a point; thence S 00°00'00" E a distance of 70.00 feet to a point; thence S
 70°00'00" W a distance of 70.00 feet to the Point of Beginning. Said above described Lease Area contains 4,900.0 square feet or 0.11 acres, more or less.

EXECUTIVE DIRECTOR SIGNATURE _____ DATE _____

ZD-3



1 TOWER ELEVATION

SCALE: 3/32"=1'-0" (FULL SIZE)

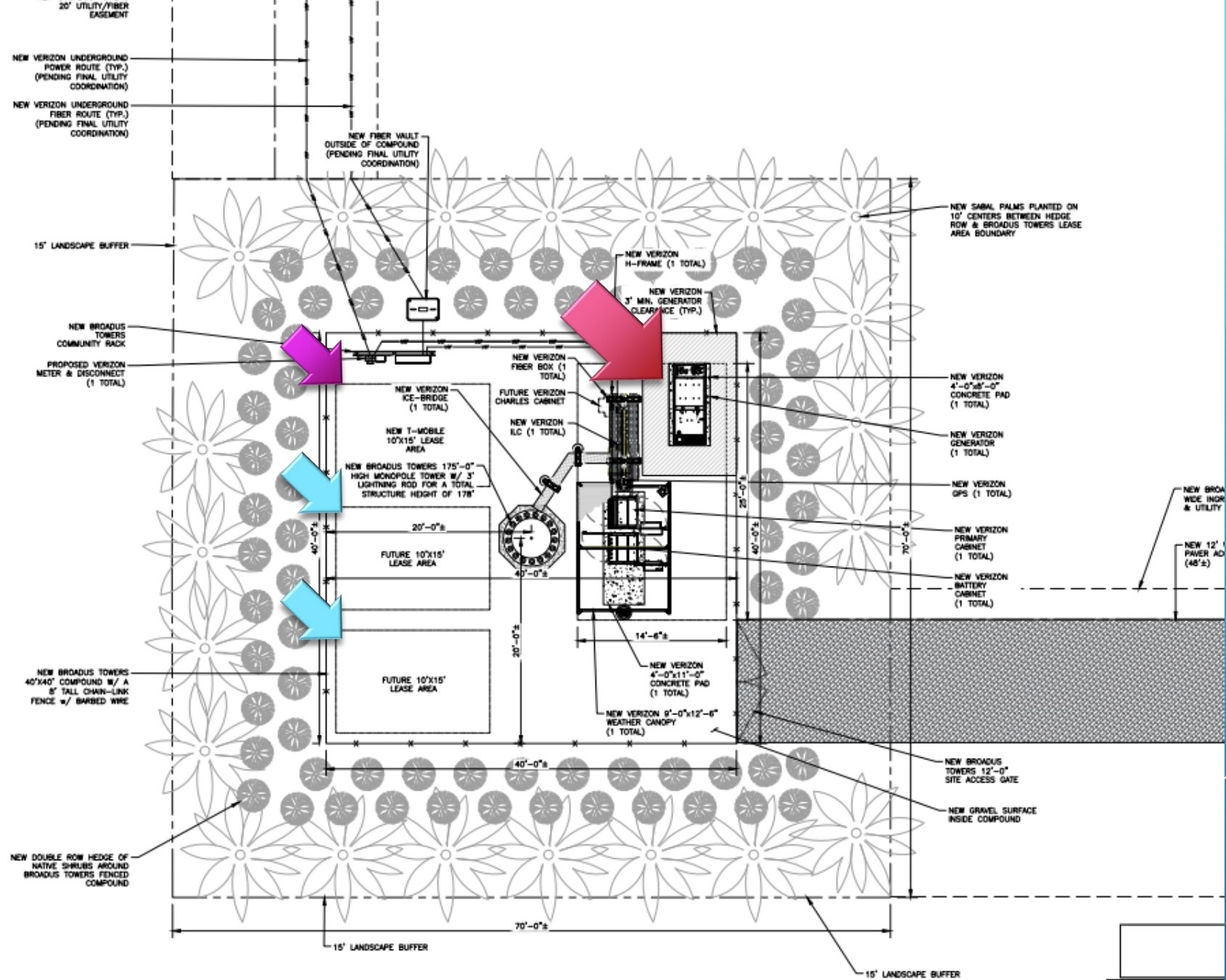


PHOTO SIMULATIONS

Mattaniah S. Jahn



Photo Simulation Map



Sim 7

Sim 8

Sim 1

Sim 6

Sim 2

Sim 5

Sim 3

Sim 4

THE PRESERVE AT CORKSCREW





verizon^v
FL-101
19980 Bella Terra Blvd, Estero, FL
**175ft. MONOPOLE
SIMULATION**
View #1 from Corkscrew Road
approximately 350ft. northeast of site

Sim 1

Existing View



verizon[✓]
FL-101

19980 Bella Terra Blvd, Estero, FL
**175ft. MONOPOLE
SIMULATION**
View #2 from Lucera Court
approximately 830ft. southeast of site

Sim 2



verizon^v
FL-101
19980 Bella Terra Blvd, Estero, FL
175ft. MONOPOLE
SIMULATION
View #3 from Larino Loop
approximately 1,060ft. south of site

Sim 3

Existing View



verizon^v
FL-101

19980 Bella Terra Blvd, Estero, FL
**175ft. MONOPOLE
SIMULATION**
View from #4 Larino Loop
approx. 1,290ft. south-southwest of site

Sim 4



verizon^v
FL-101

19980 Bella Terra Blvd, Estero, FL
**175ft. MONOPOLE
NOT VISIBLE**

View #5 from Villa Preserve Lane
approximately 1,330ft. southwest of site

Sim 5



verizon^v
FL-101

19980 Bella Terra Blvd, Estero, FL
175ft. MONOPOLE
NOT VISIBLE

View #6 from Cypress Shadows Blvd
approximately 1,925ft. west of site

Sim 6

Existing View



verizon^v
FL-101

19980 Bella Terra Blvd, Estero, FL
**175ft. MONOPOLE
SIMULATION**
View #7 from Blue Bay Circle
approximately 1,300ft. Northwest of site

Sim 7

Existing View



verizon^v
FL-101

19980 Bella Terra Blvd, Estero, FL
**175ft. MONOPOLE
SIMULATION**
View #8 from Blue Bay Circle
approximately 560ft. Northwest of site

Sim 8

RF NEED – VERIZON

Mattaniah S. Jahn



COMPTON

Lee County, FL

Prepared by Verizon Wireless RF Engineering

Darwin Feliz

December 13, 2022



Introduction:

This Verizon proposed tower, Compton is needed to improve wireless service coverage to the near by communities and roads.

Coverage is the need to expand wireless service into an area that either has no service or bad service. The request for service often comes from customers or emergency personnel. Expansion of service could mean improving the signal levels in a large apartment complex or new residential community. It could also mean providing new service along a newly built highway.

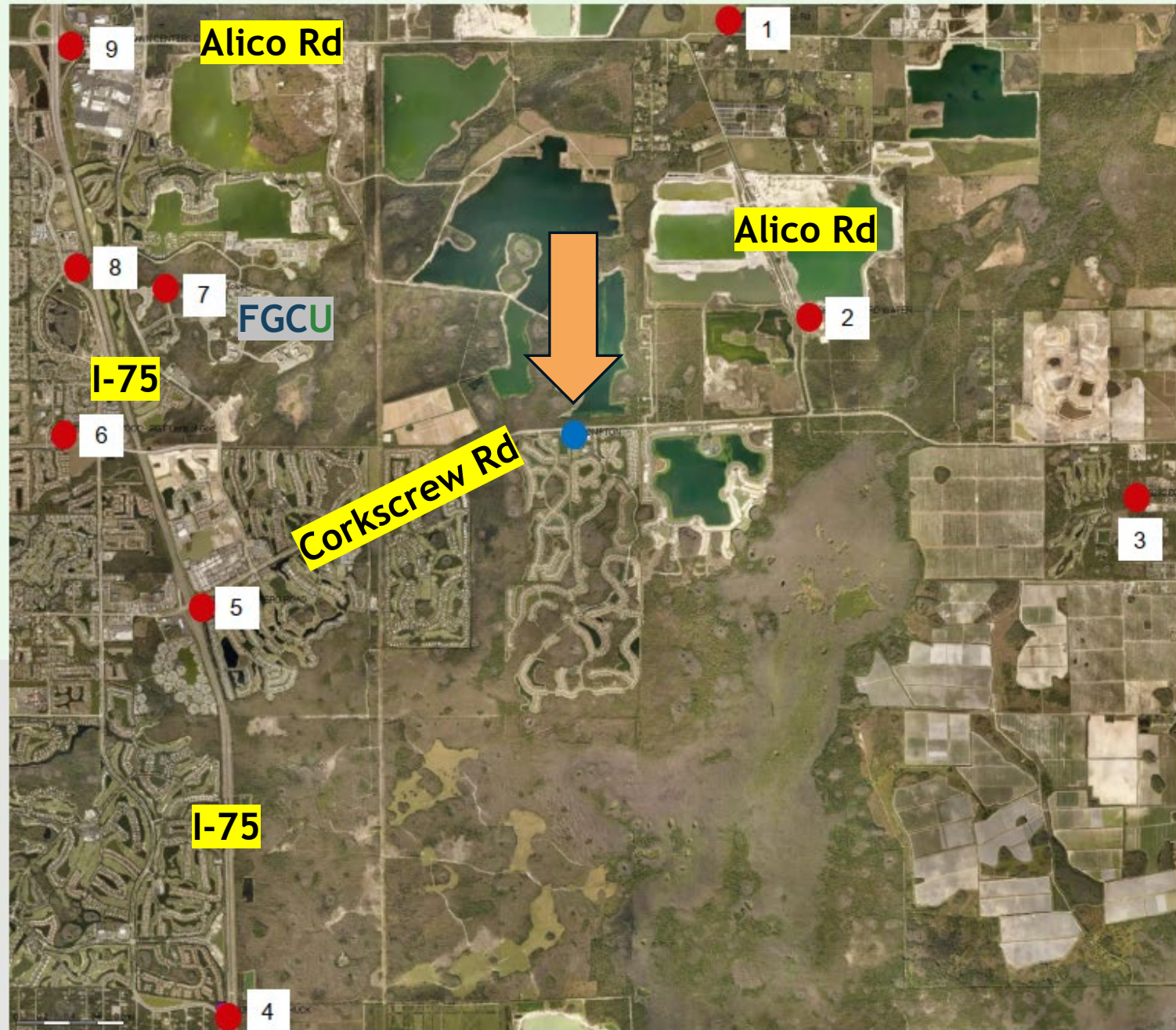
Capacity is the need for more wireless resources. Cell sites have a limited amount of resources to handle voice calls, data connections, and data volume. When these limits are reached, user experience quickly degrades. This could mean customers may no longer be able to make/receive calls nor be able to browse the internet. It could also mean that webpages will be very slow to download.

Verizon Wireless Existing Sites

Map Site Number	VzW Site Name	Tower Height (ft)	Structure Type	Structure Owner	Latitude	Longitude
1	STI Alico Road	150	Flag/Uni pole	SBA Towers	26.495483	-81.713747
2	Alico Road Water	300	Guyed	Lee County BOCC	26.463961	-81.703894
3	Corkscrew	285	Lattice	Crown Castle	26.444489	-81.664818
4	Woodchuck	110	Flag/Uni pole	SBA Towers	26.388371	-81.773288
5	Int Estero Road	234	Lattice	State of Florida	26.432442	-81.77642
6	RGT Lamb of God	149	Monopole	American Towers Corp.	26.450753	-81.793254
7	FGCU Tower	285	Lattice	Lee County BOCC	26.466139	-81.781
8	FGCU	140	Flag/Uni pole		26.468883	-81.79105
9	Gulf Coast Town	108	Monopole	RowStar, LLC	26.492596	-81.792209
Proposed	Compton	149	Monopole	TBD	26.450666	-81.731589

Verizon Wireless Sites

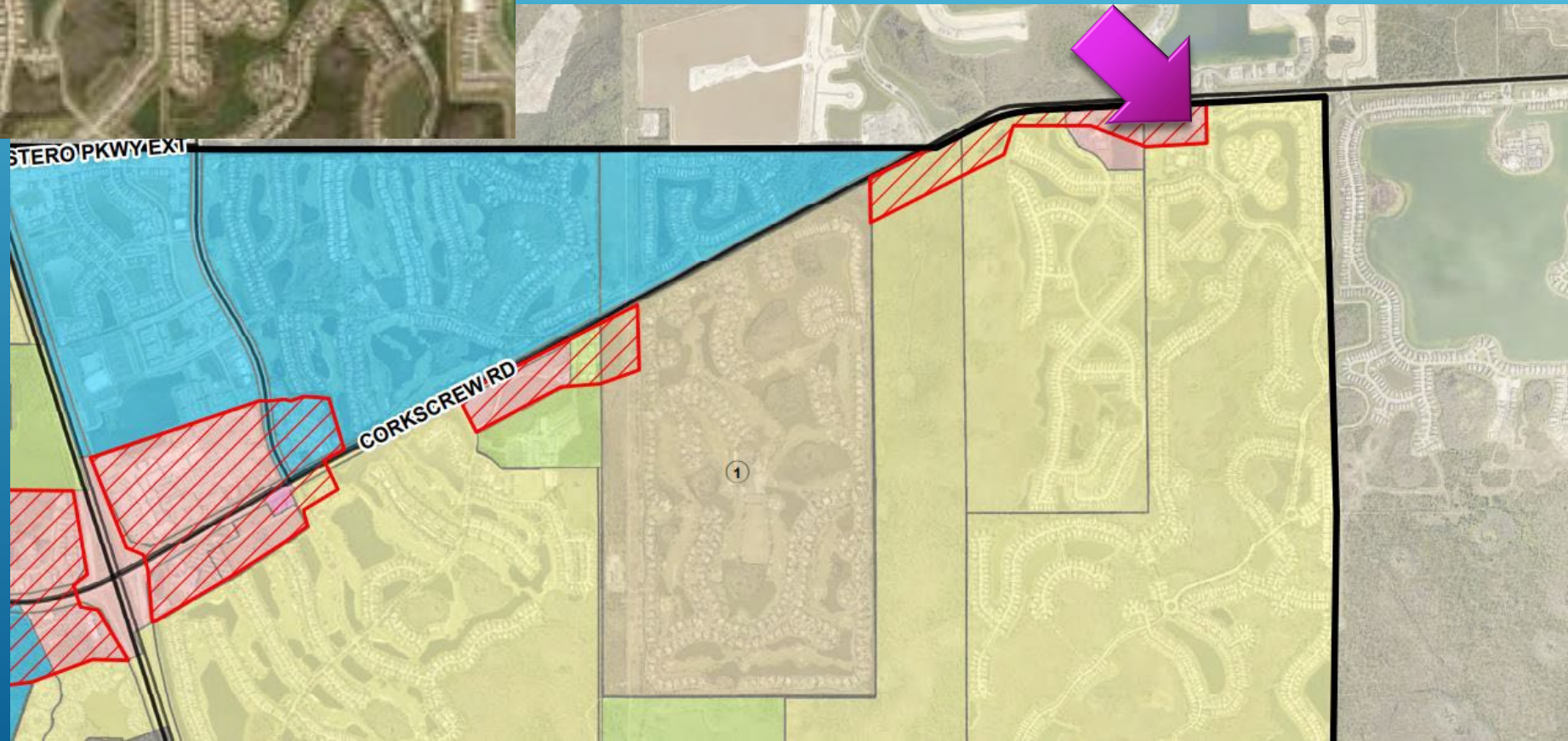
- Existing Site
- Proposed Site



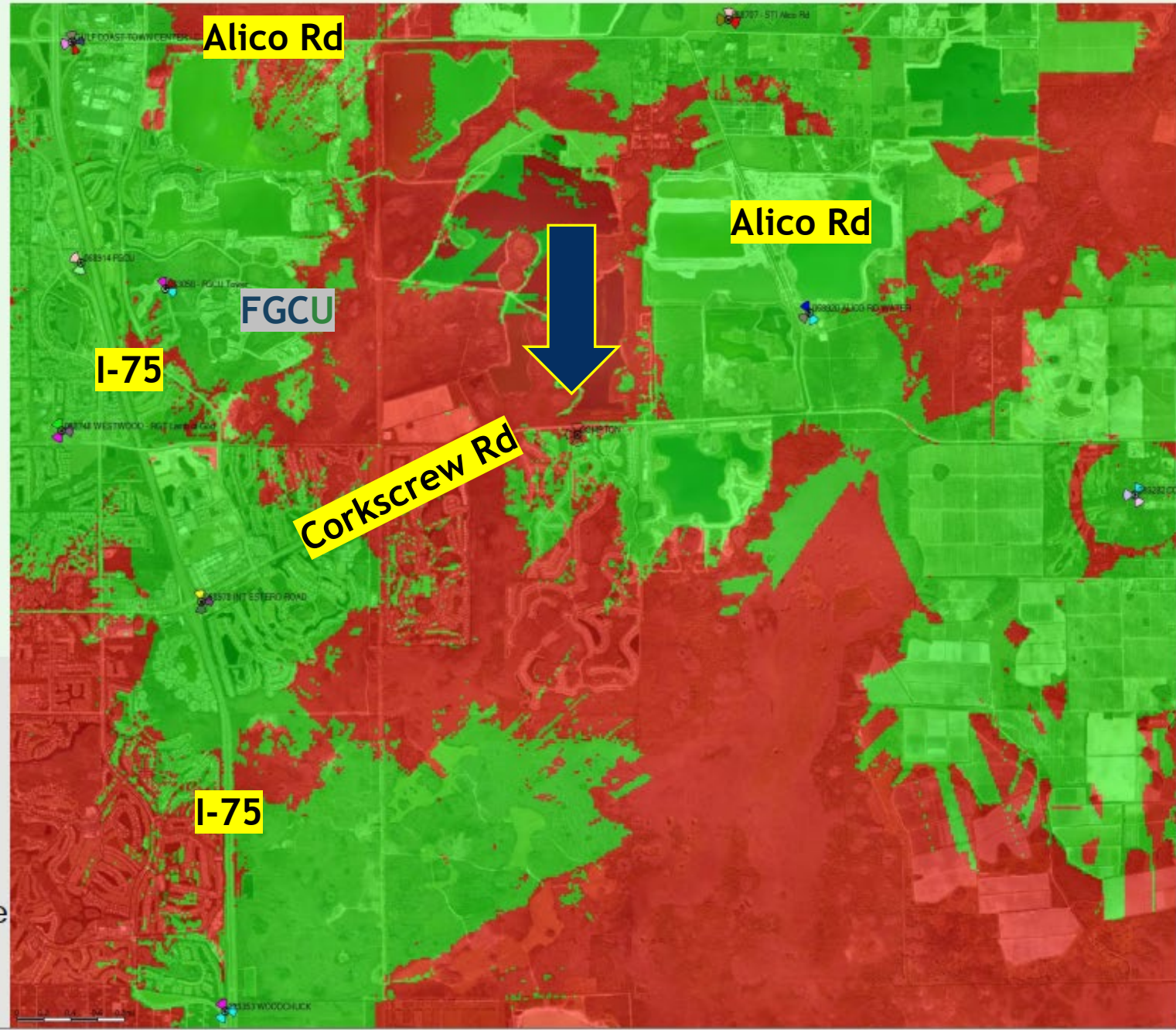
Verizon Wireless Sites Plus Search Area

- Existing Site
- Proposed Site
- Search Area





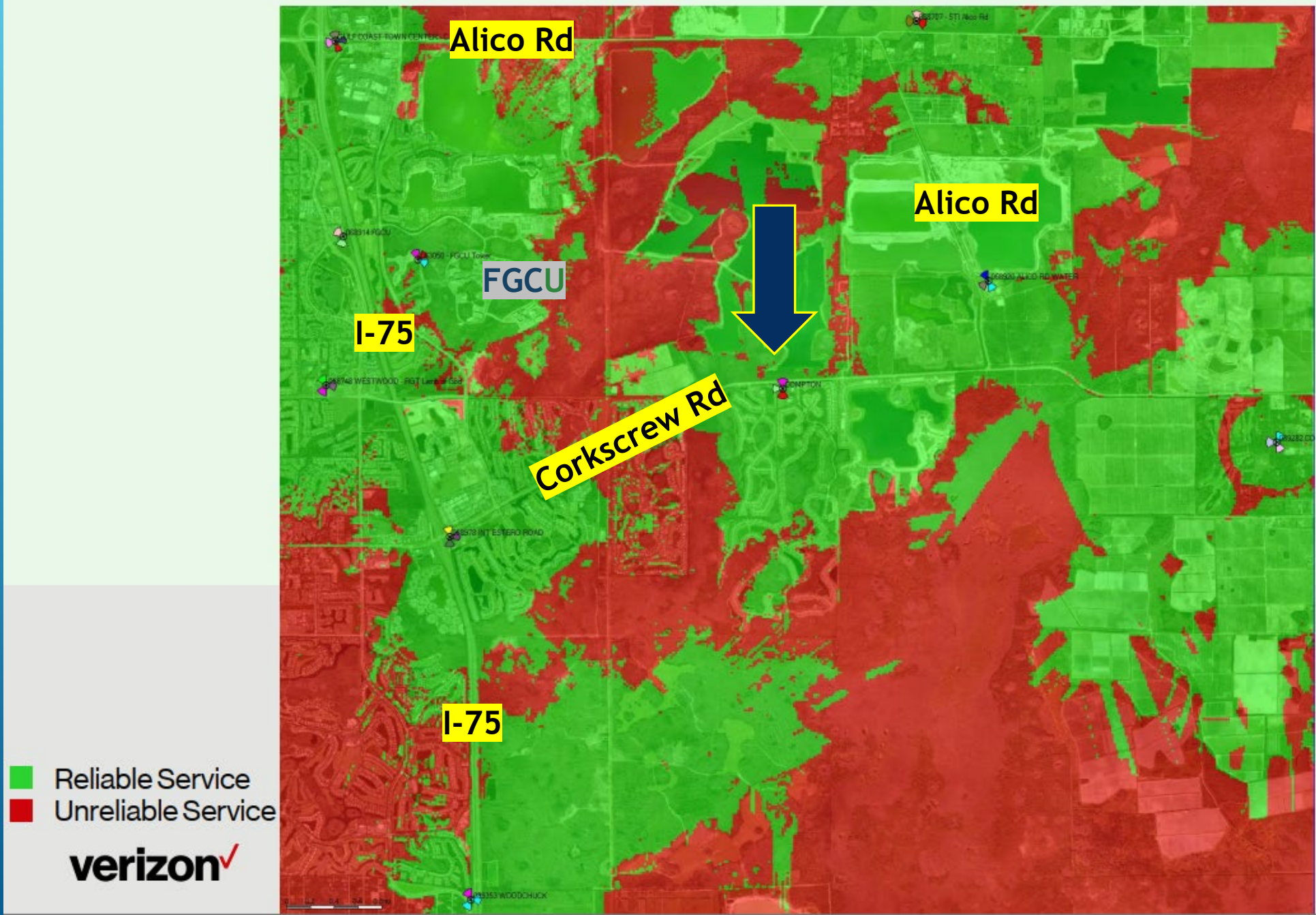
Current AWS Band Coverage



■ Reliable Service
■ Unreliable Service



Proposed AWS Band Coverage



October 13, 2023

Mary Gibbs
Community Development Department
9401 Corkscrew Palms Circle
Estero, FL 33928
noble@estero-fl.gov

**RE: Letter of Need – Verizon - Compton (Broadus – FL-101 Bella Terra)
STRAP #20-46-26-E3-010C1.00CE; Folio ID: 10488049
Planned Development Amendment Request for a
Monopole Wireless Facility**

Dear Ms. Gibbs:

This letter is to confirm Verizon's RF need to collocate upon a 178' AGL monopole wireless facility (Monopole) upon STRAP #20-46-26-E3-010C1.00CE; Folio ID: 10488049 within the Village of Estero, FL (Village). After a diligent review of the area, the proposed tower is the only known structure of sufficient height, that is available to meet Verizon's needs at this time. Verizon originally provided RF support materials and propagation maps supporting Broadus' application, with Verizon's antennas located with their center line at 140' above the ground.

During the pendency of the application, several members of the Bella Terra Community (Bella Terra) expressed concern that Verizon's reliable signal levels will not be able to reach the southern portions of Bella Terra. The cellular frequencies that the FCC licenses to cellular carriers in the US are strongly affected by the built and natural environment. Objects such as houses and trees can scatter cellular signals and reduce the coverage range for reliable signals (ground scatter). The primary method to account for ground scatter is to increase the height of the antennas sending out the signal so that they may get above more of the objects creating the ground scatter and achieve a better line of sight to the cellular devices around the tower.

I have reviewed Verizon's Radio Frequency propagations and proprietary Radio Frequency metrics. If the Village were to approve a tower tall enough to allow Verizon to set its antenna center line at 170' above the ground, the antennas would be subject to less ground scatter, which would allow Verizon to achieve stronger signal levels and more reliable cellular connections to cellular devices in the southern portion of the Bella Terra Community.

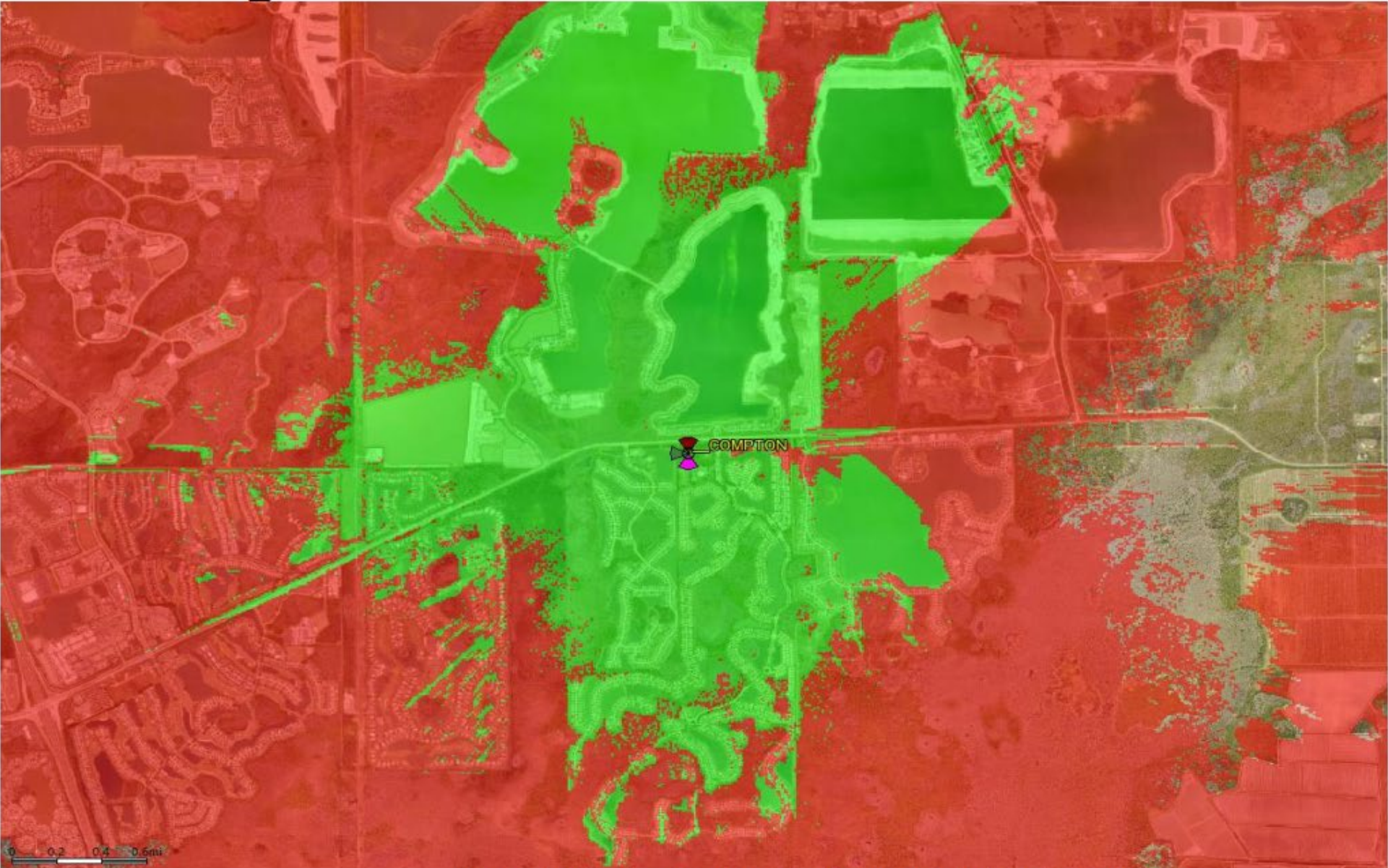
Thank you for your time on this important project serving the Eastern portion of the Village of Estero.

Sincerely,



William Compton
Senior Engineer - RF Design
Verizon Wireless

Future Coverage – Antennas at 170'

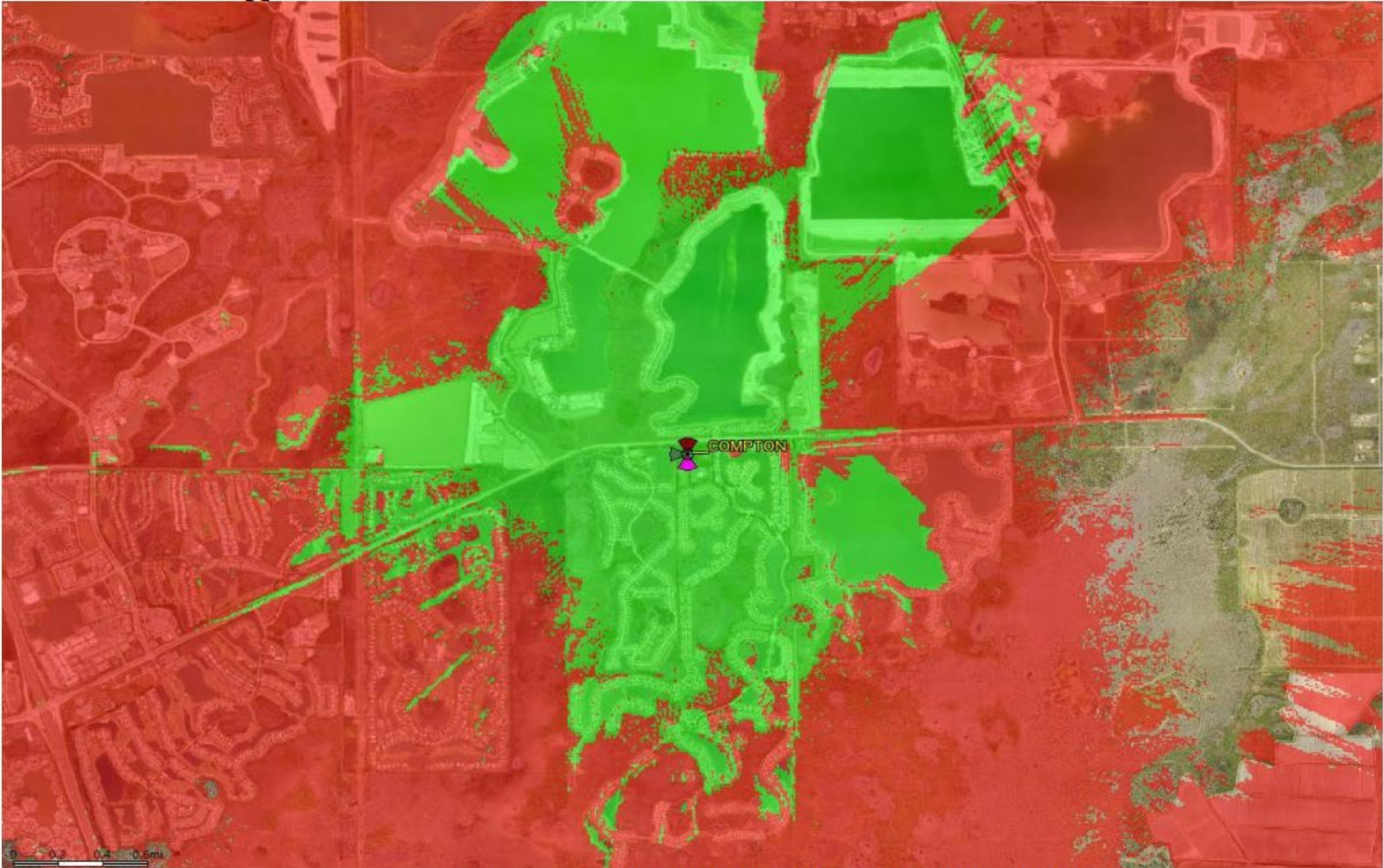


Reliable Service
Unreliable Service



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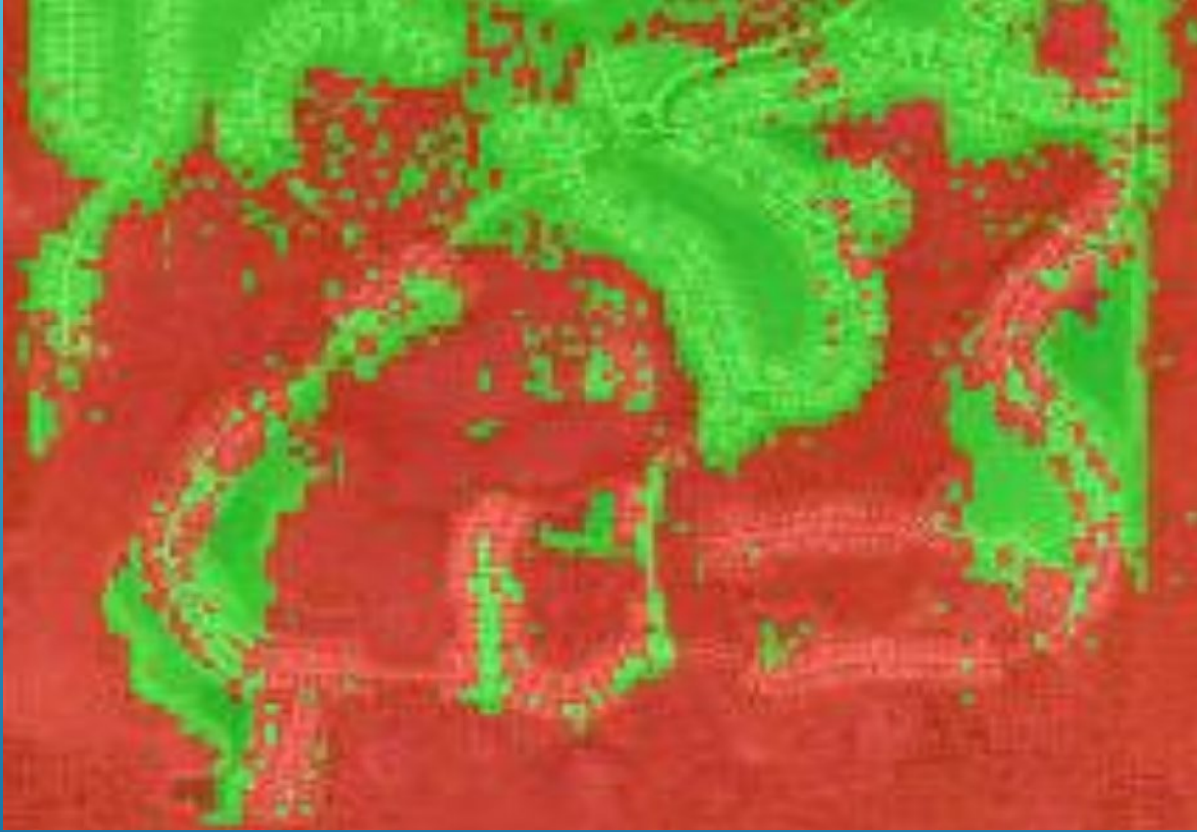
Future Coverage – Antennas at 140'



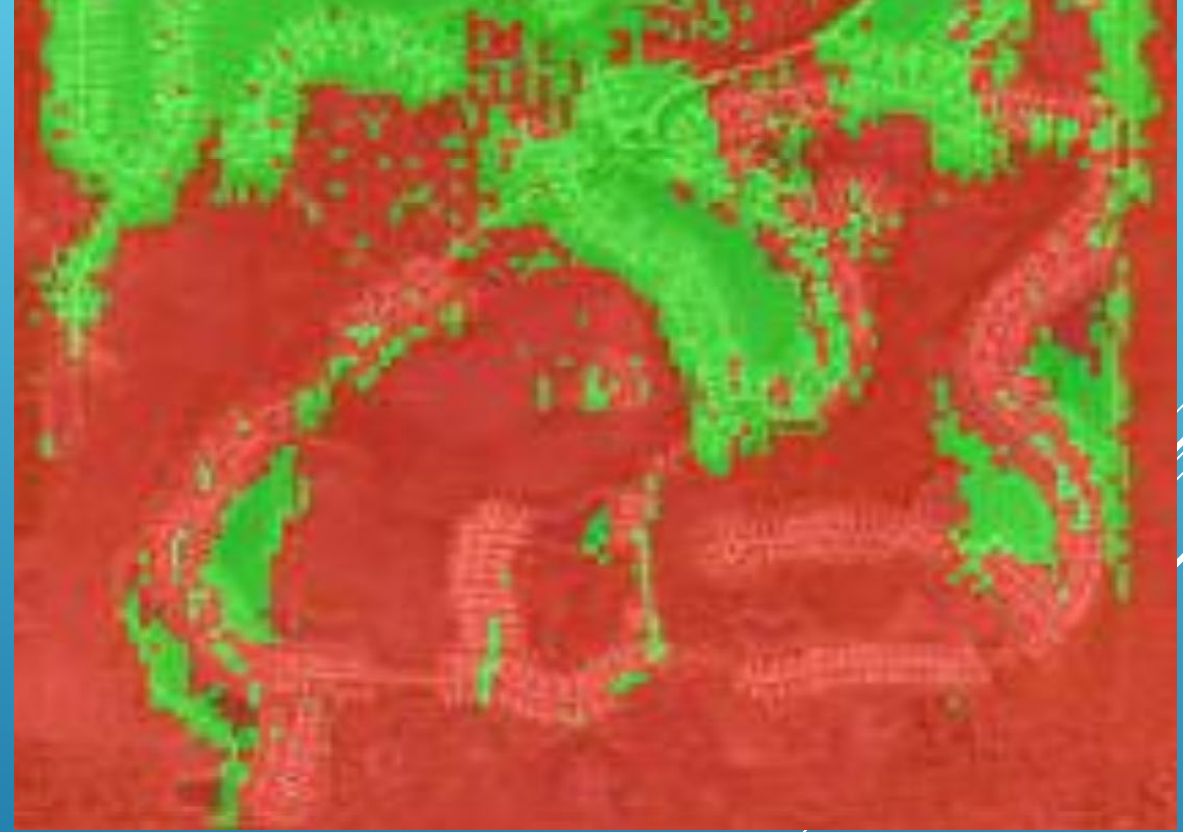
Reliable Service
Unreliable Service



Verizon confidential and proprietary. Unauthorized disclosure, reproduction or other use prohibited.

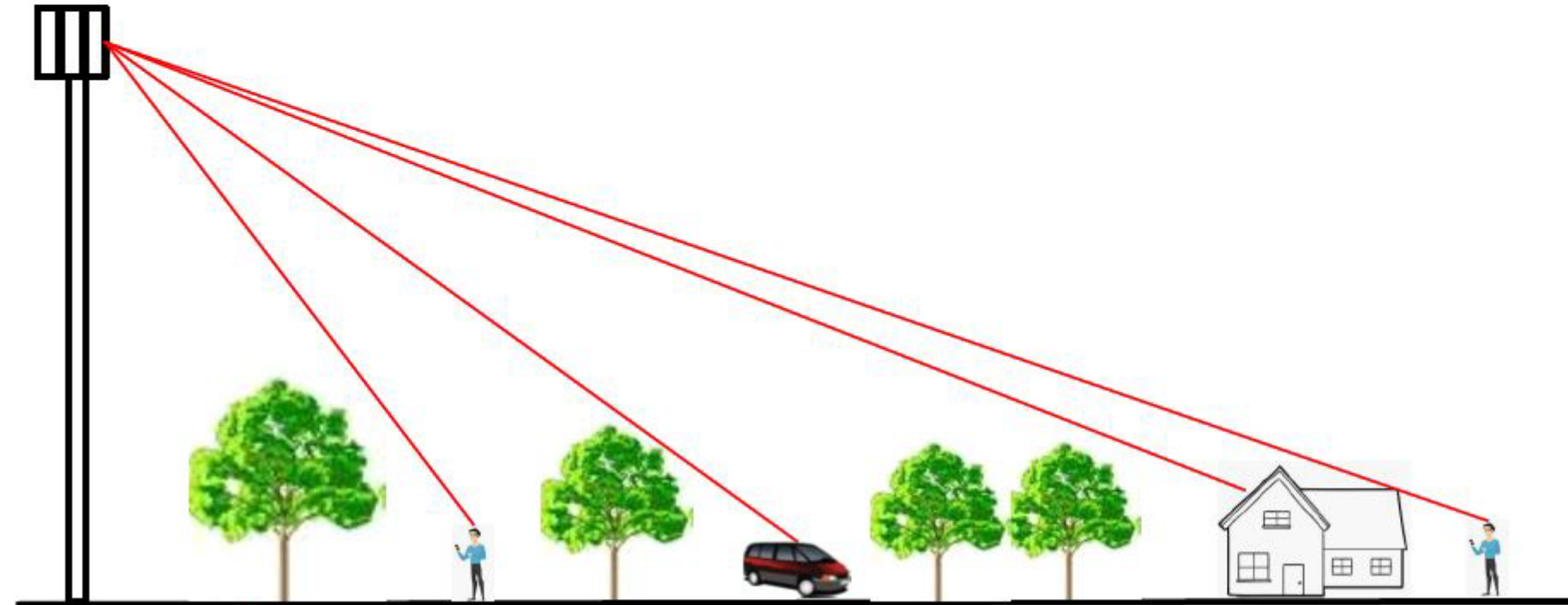
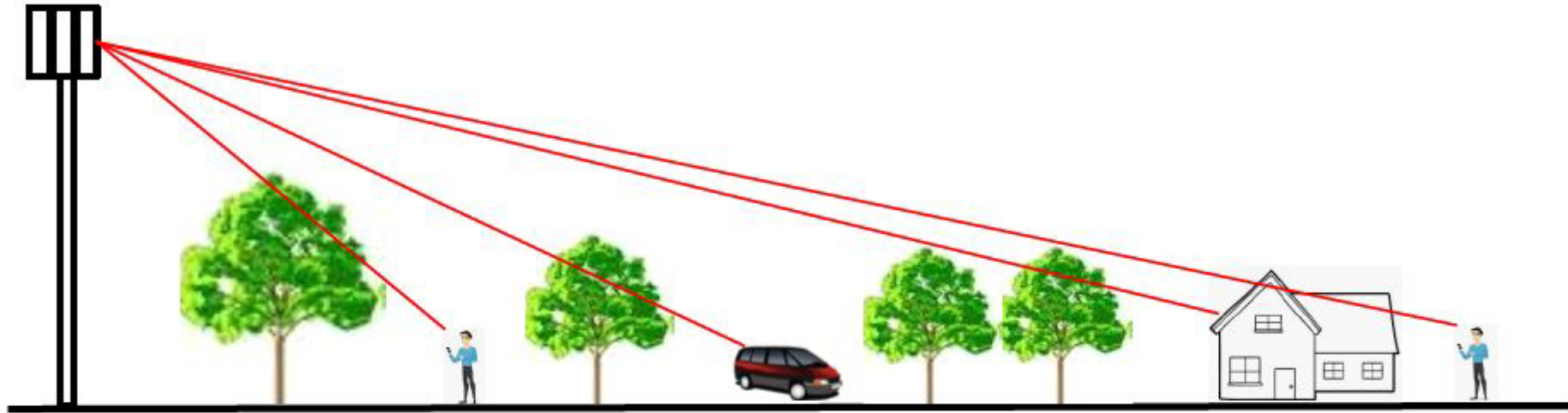


170' ACL



140' ACL

Clutter Height Impacts on Serving Site Heights

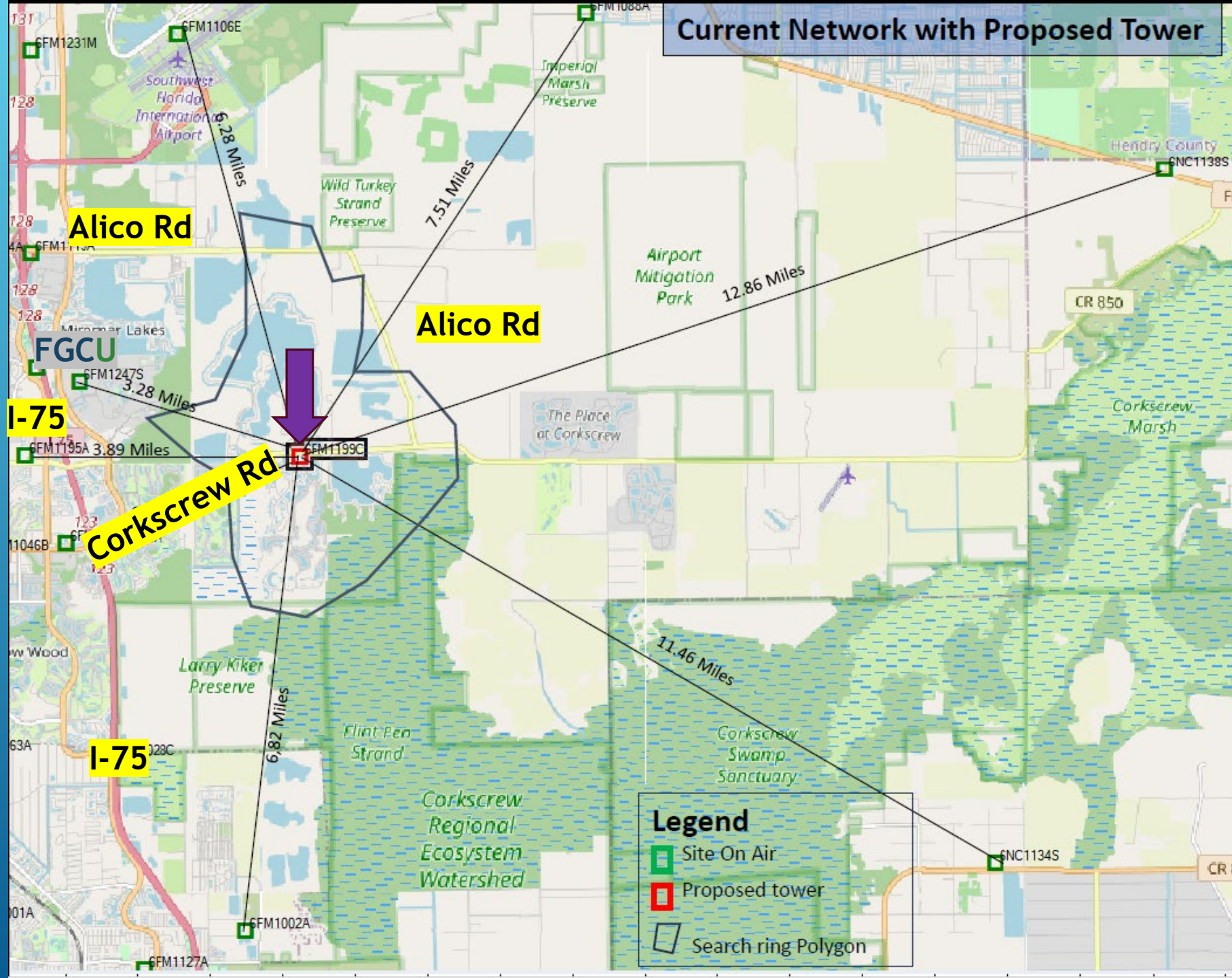


RF NEED – T-MOBILE

Mattaniah S. Jahn



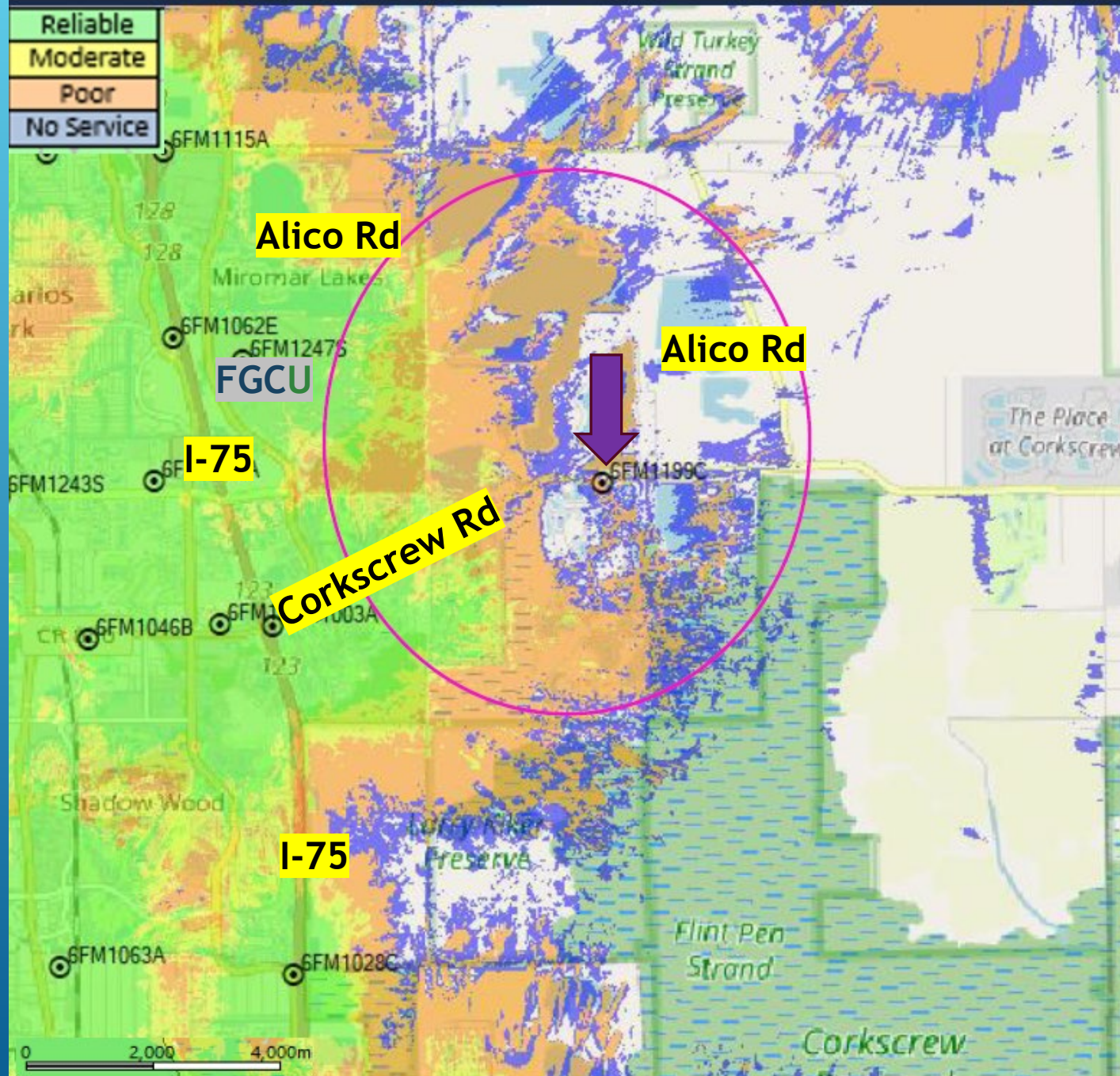
Current Network with Proposed Tower



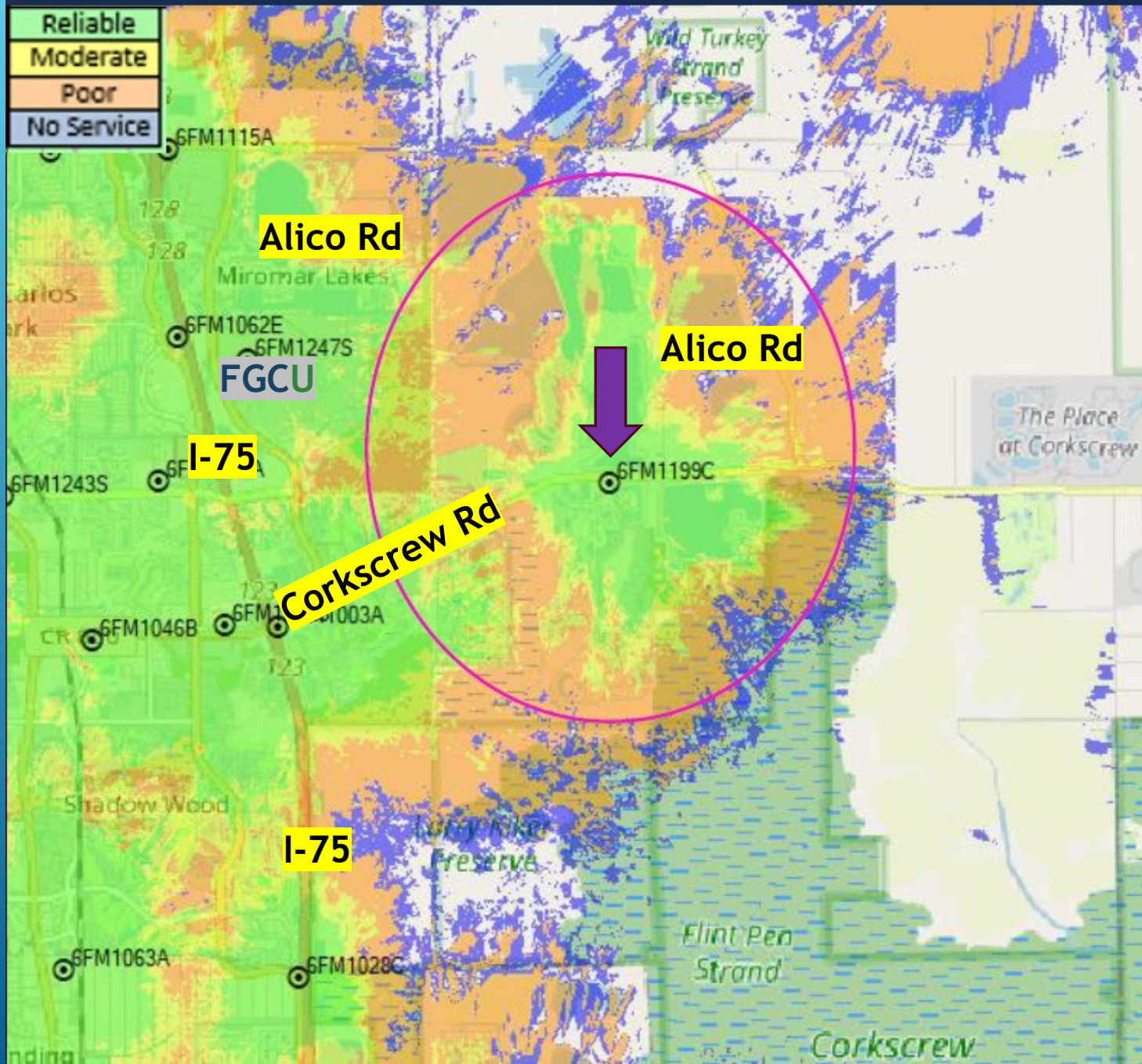
Legend

- Site On Air
- Proposed tower
- Search ring Polygon

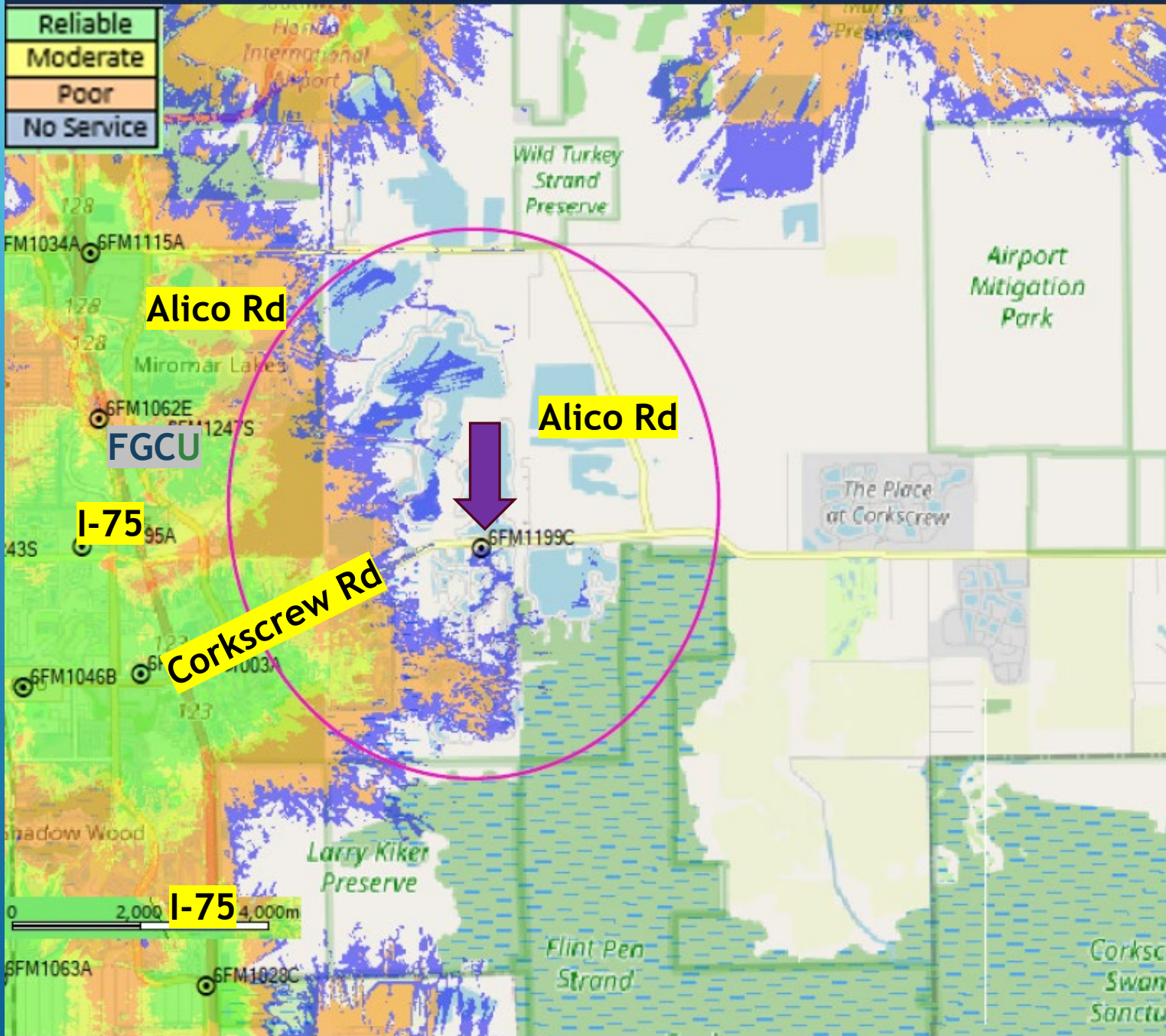
Existing 4G T-Mobile Service



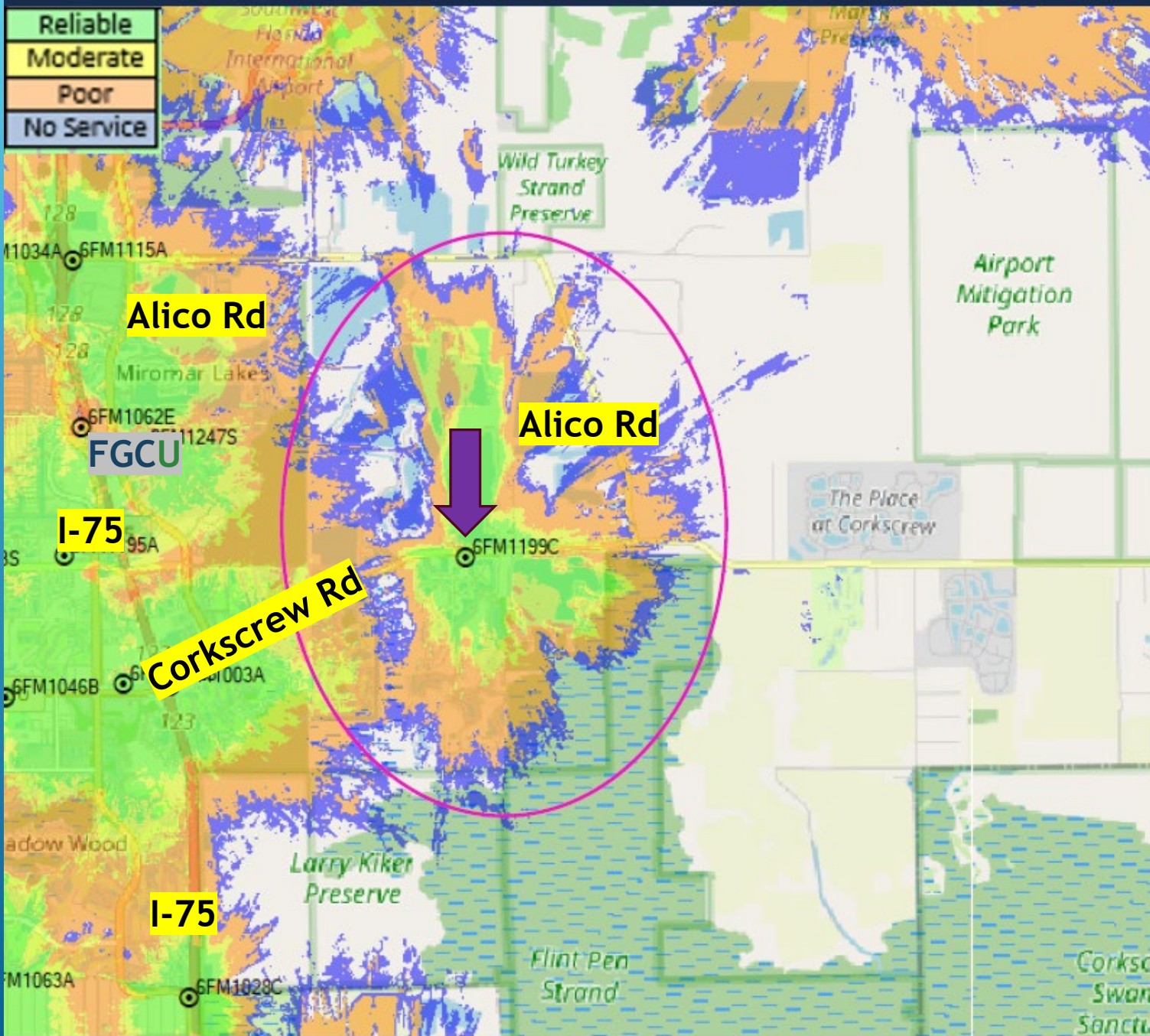
Proposed 4G T-Mobile Service



Existing 5G T-Mobile Service

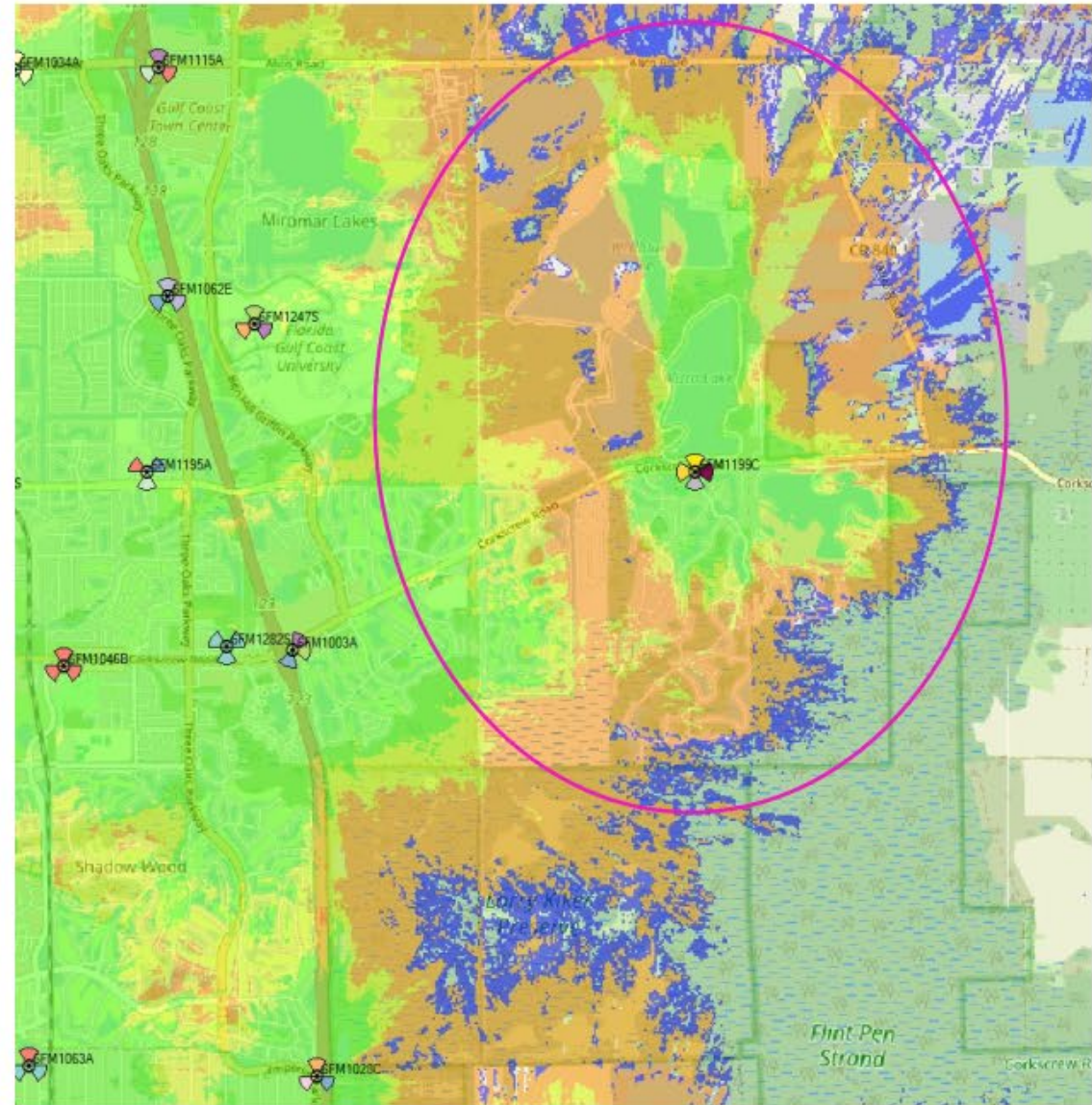
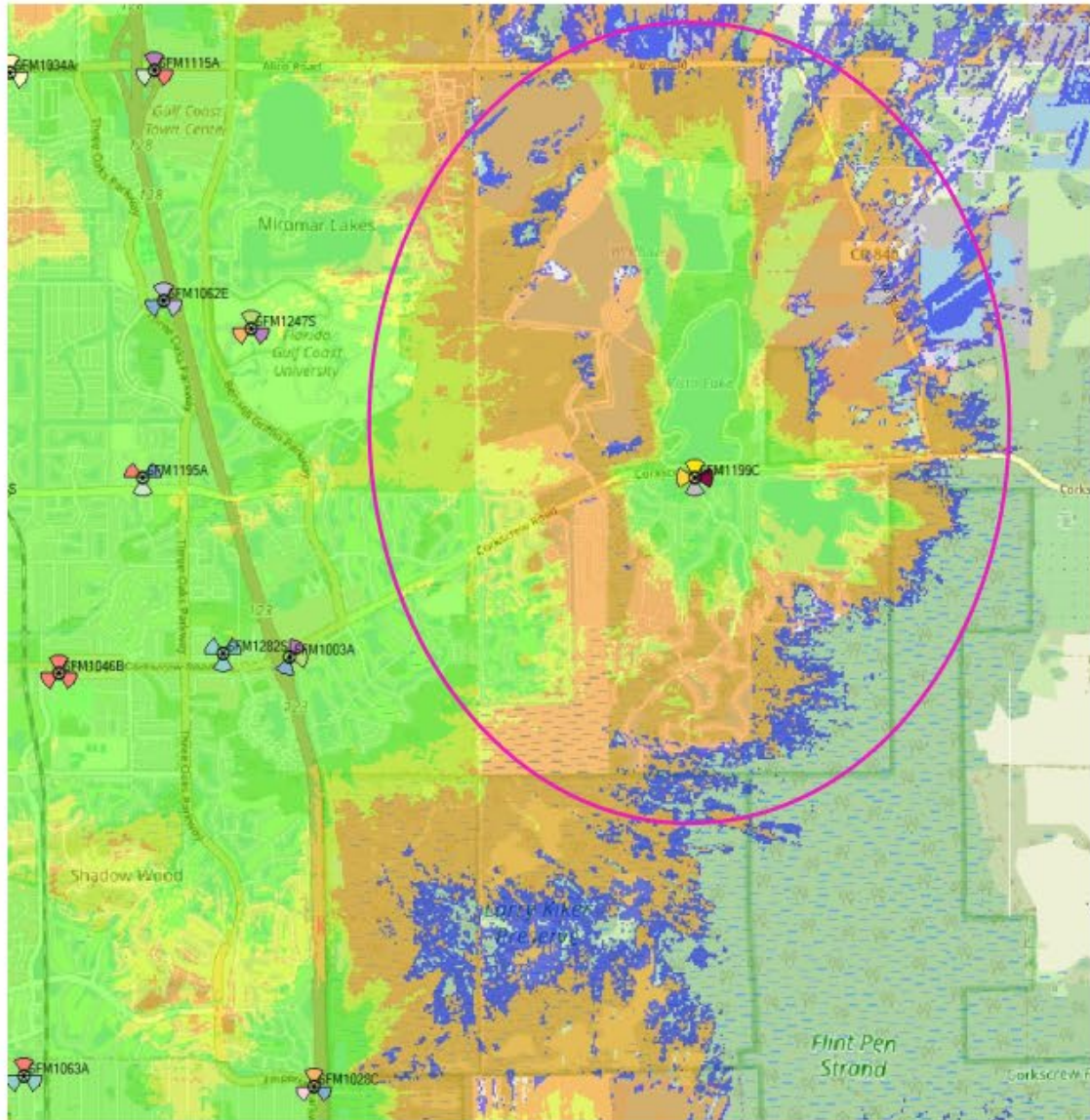


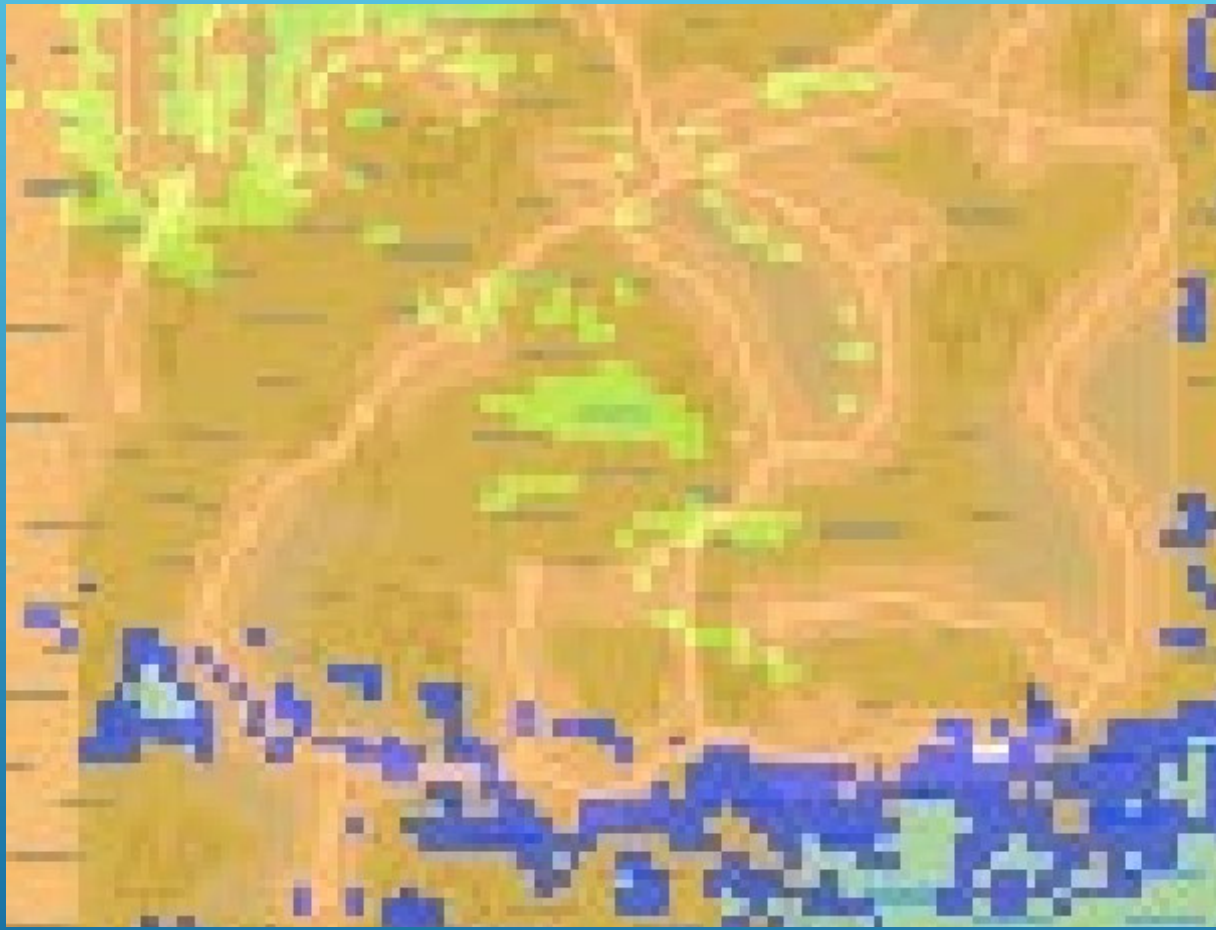
Proposed 5G T-Mobile Service



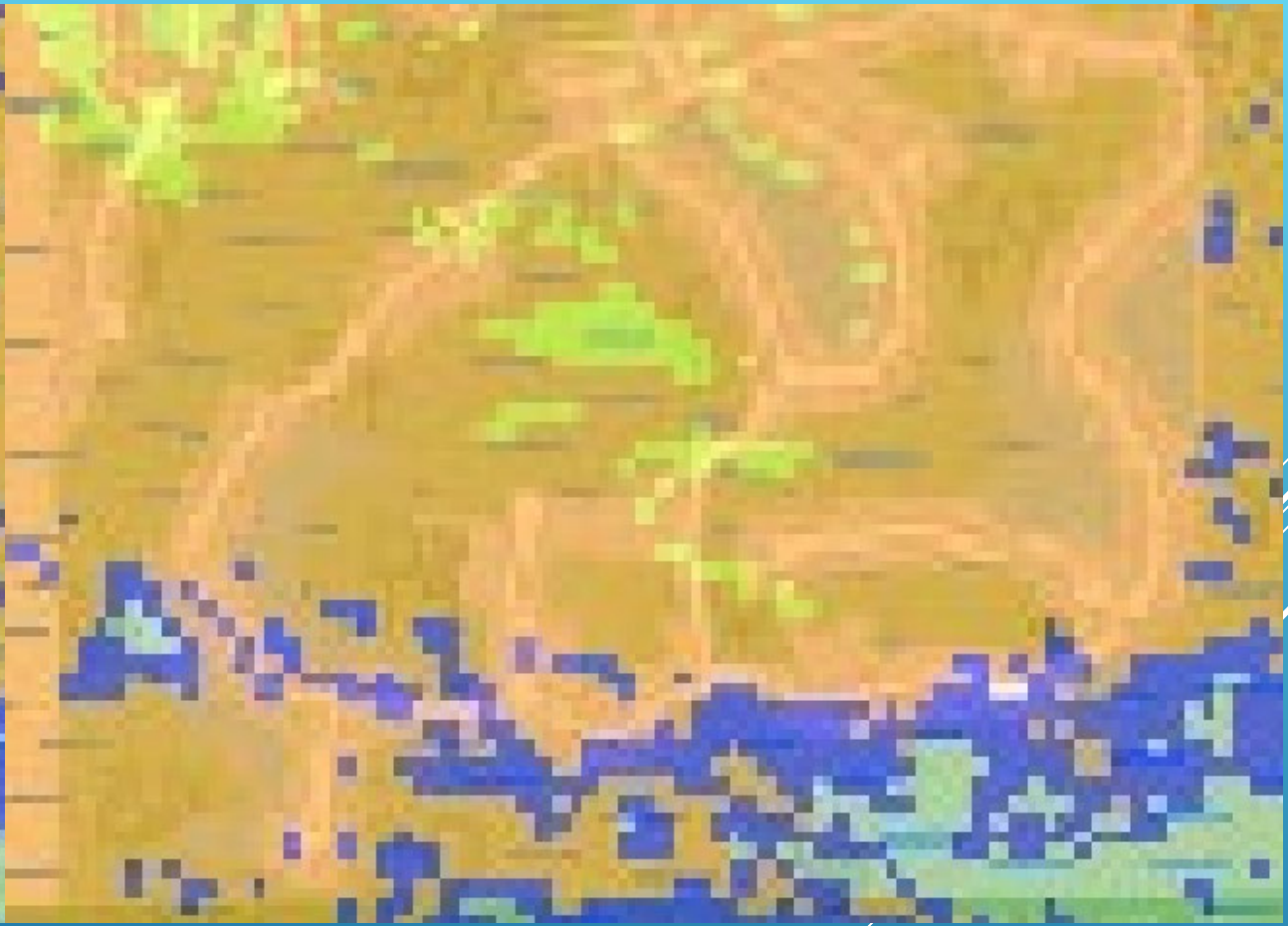
Proposed 4G T-Mobile Service @ 130 feet

Proposed 4G T-Mobile Service @ 160 feet



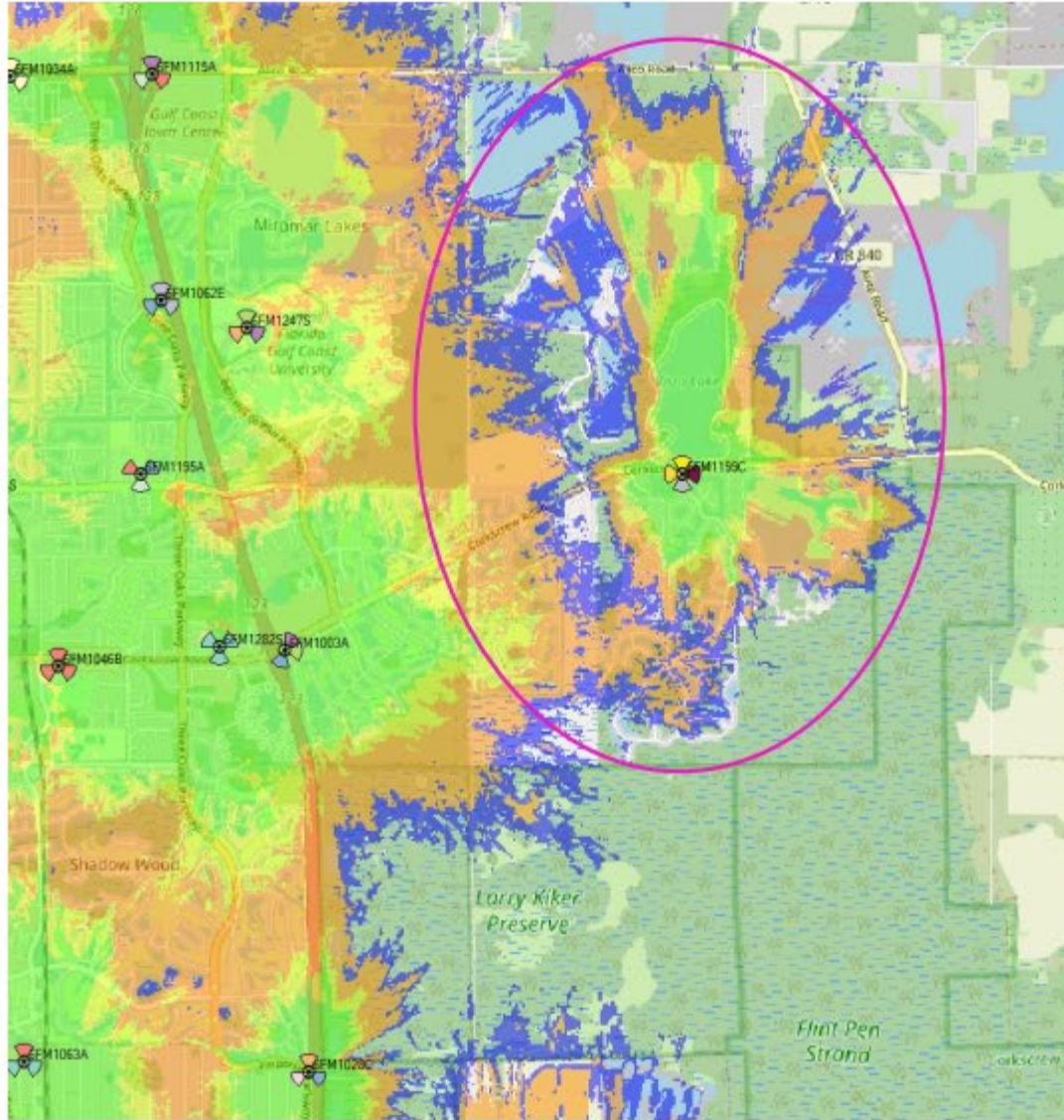


130' ACL - 4G

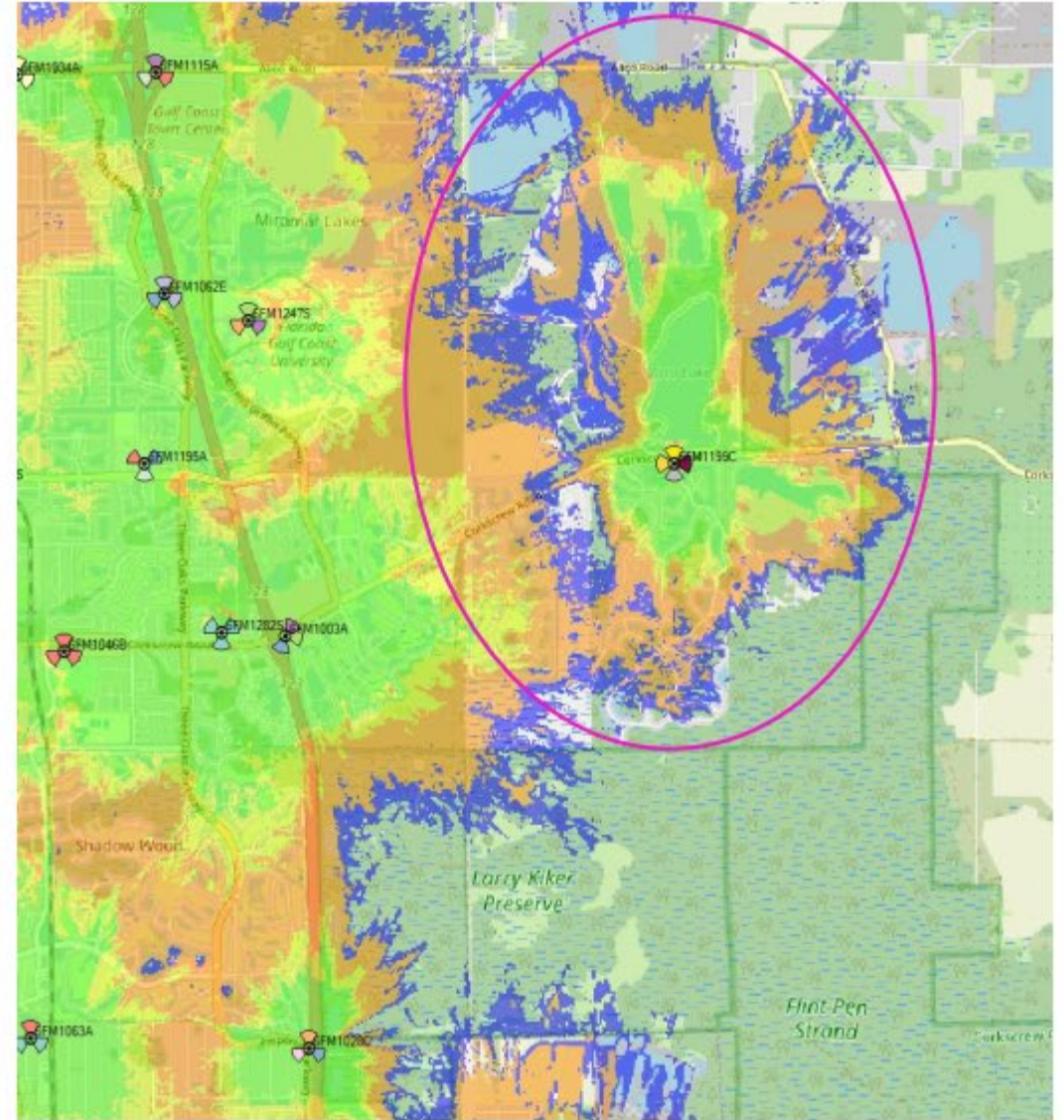


160' ACL - 4G

Proposed 5G T-Mobile Service @ 130 feet

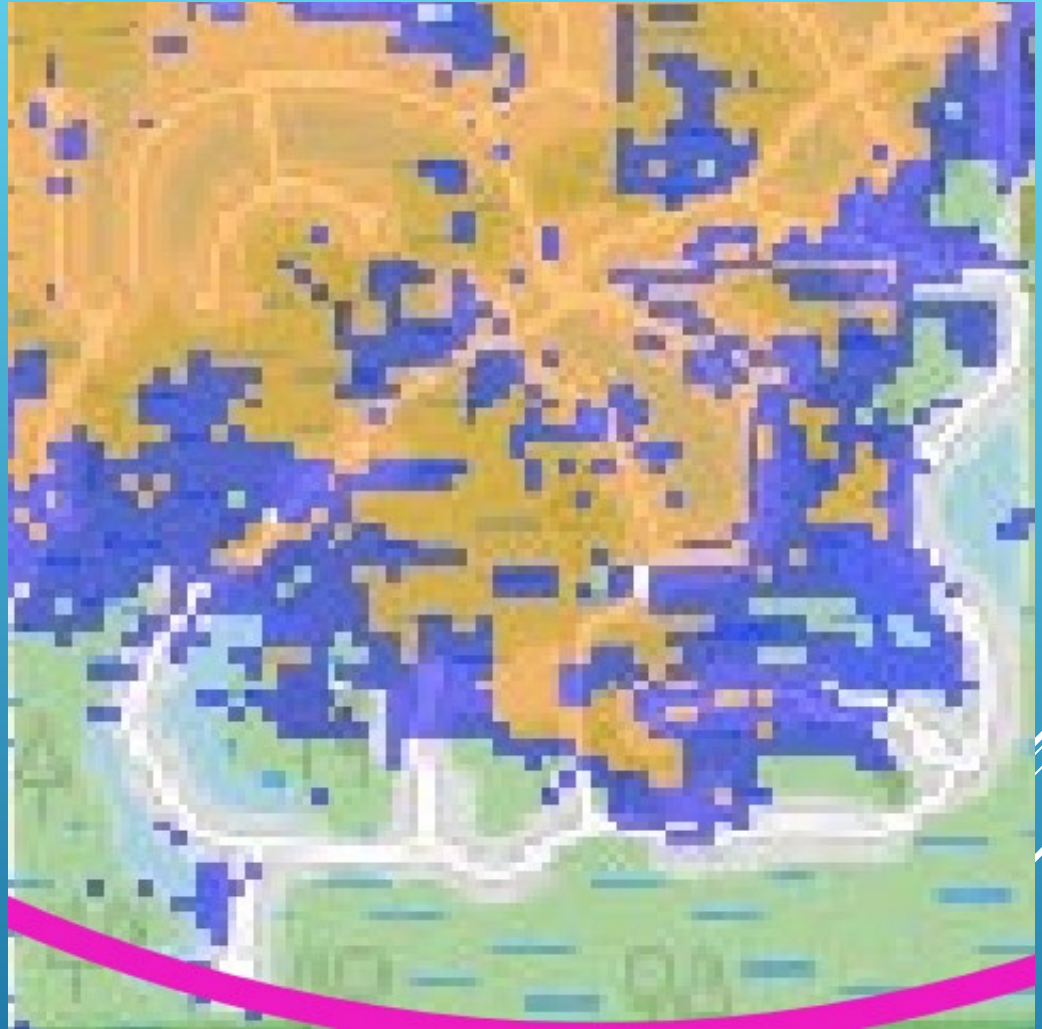


Proposed 5G T-Mobile Service @ 160 feet





130' ACL – 5G



160' ACL – 5G

Mary Gibbs
Community Development Department
9401 Corkscrew Palms Circle
Estero, FL 33928
noble@estero-fl.gov

**RE: Letter of Need – T-Mobile – 6FM1199C (Broadus – FL-101 Bella Terra)
STRAP #20-46-26-E3-010C1.00CE; Folio ID: 10488049
Planned Development Amendment Request for a
Monopole Wireless Facility**

Dear Ms. Gibbs:

This letter is to confirm T-Mobile's RF need to collocate upon a 178' AGL monopole wireless facility (Monopole) upon STRAP #20-46-26-E3-010C1.00CE; Folio ID: 10488049 within the Village of Estero, FL (Village). After a diligent review of the area, the proposed tower is the only known structure of sufficient height, that is available to meet T-Mobile's needs at this time. T-Mobile originally provided RF support materials and propagation maps supporting Broadus' application, with T-Mobile's antennas located with their center line at 130' above the ground.

During the pendency of the application, several members of the Bella Terra Community (Bella Terra) expressed concern that T-Mobile's reliable signal levels will not be able to reach the southern portions of Bella Terra. The cellular frequencies that the FCC licenses to cellular carriers in the US are strongly affected by the built and natural environment. Objects such as houses and trees can scatter cellular signals and reduce the coverage range for reliable signals (ground scatter). The primary method to account for ground scatter is to increase the height of the antennas sending out the signal so that they may get above more of the objects creating the ground scatter and achieve a better line of sight to the cellular devices around the tower.

I have reviewed T-Mobile's Radio Frequency propagations and proprietary Radio Frequency metrics. If the Village were to approve a tower tall enough to allow T-Mobile to set its antenna center line at 160' above the ground, the antennas would be subject to less ground scatter, which would allow T-Mobile to achieve stronger signal levels and more reliable cellular connections to cellular devices in the southern portion of the Bella Terra Community.

Thank you for your time on this important project serving the Eastern portion of the Village of Estero.

Sincerely,



Olga Maffeo
Sr Engineer, Radio Frequency
T-Mobile

HOUSEKEEPING

Mattaniah S. Jahn



Notarized Written Consent to Reduce
Setback for Communication Tower

Re: Broadus Towers, LLC – FL-101 Bella Terra
STRAP 20-46-26-E3-0101C1.00CE

1. I am Pete Ferreira. I am at least 18 years of age and my address is 1467 Railhead Blvd., Naples, FL 34410.
2. I am the Regional Vice President - Construction for Hotwire Communications and have the authority to execute this affidavit.
3. Hotwire Communications Owns a fiber telecommunications facility located on STRAP 20-46-26-E3-0101C1.00CE (the "Fiber Hut"). Broadus Towers, LLC (Broadus) proposes to construct a 178' AGL monopole style communication tower (Monopole) on Parcel No 20-46-26-E3-0101C1.00CE, neighboring the Fiber Hut to the West.
4. Staff for the Village of Estero typically require the Monopole to be separated from structures like the Fiber Hut by 100% of the tower height, 178' in this instance.
5. I consent to Broadus' request and have no objection to the reduction of the required 178' tower setback to 45' to my property.



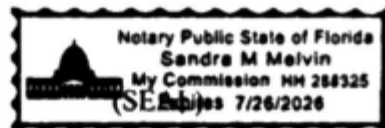
Name: Pete Ferreira

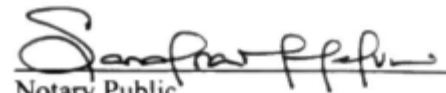
10/08/2023

Date

STATE OF FLORIDA
COUNTY OF COLLIER

The foregoing instrument was acknowledged before me this 8th day of OCTOBER, 2023, by PETE FERREIRA who is personally known to me or who has produced N/A as identification.




Notary Public
SANDRA M. MELVIN
Printed Name of Notary

Hotwire Consent

January 10, 2024

Matt A. Noble, AICP, CFM
Principal Planner
Community Development Department
9401 Corkscrew Palms Circle
Estero, FL 33928

**RE: Bella Terra Project
Tower Height and HOA review**

Dear Mr. Noble:

As President of the Bella Terra Homeowners Association this letter is to explain how the Tower Committee works within the Bella Terra HOA.

The Bella Terra residents originally authorized the tower project via survey referendum, it was one of our highest participation votes of the residents in recent years. The survey was merely to obtain the membership's consensus on whether the parcel should be used for the tower project. The fine details of development over time, the tower has been discussed. In addition to the tower project, we have communicated the vision for the community through open monthly meetings and anecdotal responses. The tower project is about their view. The tower project is to all.

The tower project's location on the parcel is a matter of high sensitivity to our residents because the community intends to develop the rest of the parcel. Our front 12+ acre parcel has been an area of much consideration and scrutiny within our community over the past few years. Many hours have been spent trying to best understand the use of this property as far as future development is concerned. Ideally, we would like to create a utility area with as small of a footprint as possible in the northeast corner of the parcel, leaving as much raw land to be improved for our residents' enjoyment through development of additional amenities. The way the tower is situated in the current proposal provides that maximization and eliminates areas of "deadspace" which cannot be used for future amenity development.

The tower project's location on the parcel is a matter of high sensitivity to our residents because the community intends to develop the rest of the parcel. Our front 12+ acre parcel has been an area of much consideration and scrutiny within our community over the past few years. Many hours have been spent trying to best understand the use of this property as far as future development is concerned. Ideally, we would like to create a utility area with as small of a footprint as possible in the northeast corner of the parcel, leaving as much raw land to be improved for our residents' enjoyment through development of additional amenities. The way the tower is situated in the current proposal provides that maximization and eliminates areas of "deadspace" which cannot be used for future amenity development.

Thank you in advance for your assistance in this matter. Please do not hesitate to contact me if I am able to provide you with additional information.

For calendar year 2021

Wireline – 9,153

Wireless – 153,427

VoIP – 14,493

SMS – 270

Unclassified – 5,327



**A message was sent to you regarding
record request #22-9347:**

RE: PUBLIC RECORDS REQUEST

Dear Aya Abunada,

The Orange County Sheriff's Office received a public information request from you on 05/13/2022. Your request mentioned:

Please provide us with the statistics on the percentage of 911 calls made on land line vs. Wireless phones in Orange County in 2021.

Please find the response received from Communications:

According to the 2021 report provided to us by the Orange County 911 Office, the categories you describe breakdown as follows:

Land line 124,028

Wireless 1,024,672



If you need further information, please contact Orange County 911 Office.

Thank you.

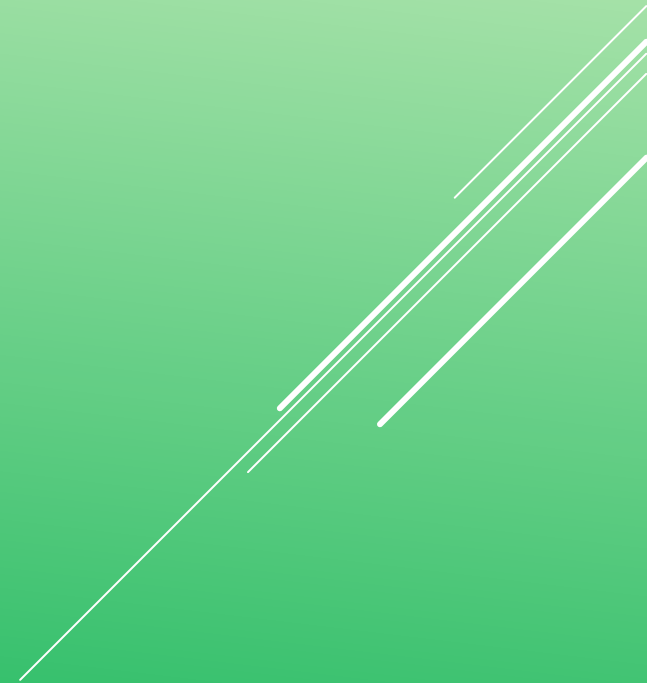
If you have any questions or need additional information, please feel free to respond to this message or contact us at 407-254-7280.

Sincerely,

Orange County Sheriff's Office
Records Section

Orange County 911 Call Statistics

**BELLA TERRA
178' AGL MONOPOLE TOWER**



(7) Preservation of local zoning authority

...

(B) Limitations

(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof--

(I) ...

(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

...

(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

**BELLA TERRA
178' AGL MONOPOLE TOWER**

