FL208 Hwy 528 & 407 Site Narrative

Gulfstream Towers is proposing to build a 199' tall monopole tower and equipment compound. The tower and equipment will be located within an 80 x 80 lease area. Within the lease area will be perimeter landscaping around a 50' x 50' opaque wooden fenced compound, a parking space, and a transformer for electrical service. Within the fenced compound will be an electrical service rack for power for each carrier on the tower, and a telco box for fiber connections. The 199' monopole tower will be centered within the fenced compound, and will be surrounded by carrier equipment. The carrier equipment will be installed at a later date, under a separate permit. The tower will utilize breakpoint technology, and will be designed with a 60' fall zone.

The 199' monopole tower will be lit per federal government standards. It will have red lights at the tower midpoint, and a flashing strobe at the top. The lights will flash at a rate approved by the FAA. The tower lighting flashes will not exceed 20 flashes per minute, per the Brevard County Land Development Code. (Sec. 62-2422(4)(b))

The antennas and equipment located on the tower will not interfere with any public safety services, and will comply to the fullest extent possible with the rules, regulations, and guidelines of the FCC, and Brevard County Code (Sec. 62-2411). Each owner of an antenna, antenna array or application for a co-location shall demonstrate...compliance with "good engineering practices" as defined by the FCC in its rules and regulations...".

The tower will be designed to support multiple carriers. One carrier will be installing their equipment under separate permit once the CO of the tower permit is completed. The tower will support three more carriers, and they will install their equipment when the budget has been approved by their corporate office. When Gulfstream Towers applies for their permit, signed and sealed structural tower drawings will be submitted showing the capacity for the tower to support 4 carriers.

The electrical power for the site will be 120/240v. Each carrier will use a 200 amp service. The meter rack will have all of the proper signage as required be the electrical code and the Brevard County code. Each carrier has the option of installing a generator. Gulfstream Towers will not be installing a generator under their permit. The future generators (if installed) will meet the noise and electrical requirements of the Brevard County Code. Signs will be located every 20 feet and attached to the fence or wall and will display in large, bold, high contrast letters (minimum height of each letter 4 inches) the following: "HIGH VOLTAGE — DANGER."

In the event the tower becomes abandoned, it will be removed per the Brevard County Land Development Code. "Communication facilities and the equipment compound shall be removed, at the owner's expense, within 180 days of cessation of use". (Sec. 62-2407)

The tower owner shall maintain the tower per the Brevard County Code (Sec. 62-2423), which states " Every five years, the owner of any non-exempt tower and wireless communication facilities over 35 [feet] in height shall submit to the county building official a sealed statement from a registered professional engineer that the structure is sound. The certification shall be due by the end of the month upon each anniversary of the issuance of the building permit. If the report is not provided within 14 days after receipt of written notice by the CUP holder and property owner,

towers which have not been certified shall be considered dilapidated and shall be removed by the property owner. Subject to subsection 62-1953(4), if the property owner fails to remove the tower within 30 days after receiving notice to effect removal, the county shall have the right to remove such tower and impose a lien on the site which was the subject of the application.

T-Mobile

Tuesday, December 27, 2022

To Whom It May Concern:

RE: Frequencies available for use by T-Mobile US – Project: **A2E2346B**

T-Mobile has submitted an application to install equipment on a planned communications tower located at: **TBD SR 407/Challenger Memorial Parkway, Orlando, FL 32927.**

This letter addresses: (1) the frequency band allocations licensed or transferred to T-Mobile by the Federal Communications Commission (FCC); (2) to show the reasons why the T-Mobile frequency bands will not interfere with or obstruct any public safety telecommunications.

1. T-Mobile operates on FCC licensed spectrum as follows:

Band	Transmit	Receive
2500 MHz	2496-2690 MHz	2496-2690 MHz
AWS	2130-2155 MHz	1730-1755 MHz
PCS	1930-1950 MHz	1850-1870 MHz
PCS	1980-1995 MHz	1900-1915 MHz
700 MHz	728-734 MHz	698-704 MHz
600 MHz	627-637 MHz	673-683 MHz

2. The bands allocated by the FCC for public safety telecommunications are (a): well-guarded by the "Guard Band" separation, dictated by the FCC; and (b): transmission and reception of Public Safety telecommunication takes place in a separate portion of the RF spectrum from AWS, PCS, 700 MHz and 600 MHz operations.

Equipment used by T-Mobile complies with strict standards contained in Code of Federal Regulations 47 part 24. This sets limits on emissions out of T-Mobile's licensed band to ensure no adverse effects to any other frequency band.

In summary, by transmitting only in the designated spectrum, T-Mobile will not cause interference to any other communications carrier, radio, television, or public safety communications facilities.

Respectfully,

Jason Paulley

Jason Paulley
RF Engineer, T-Mobile US

Thursday, December 29, 2022

To Whom It May Concern:

RE: Alternate existing locations around candidate **A2E2346B**

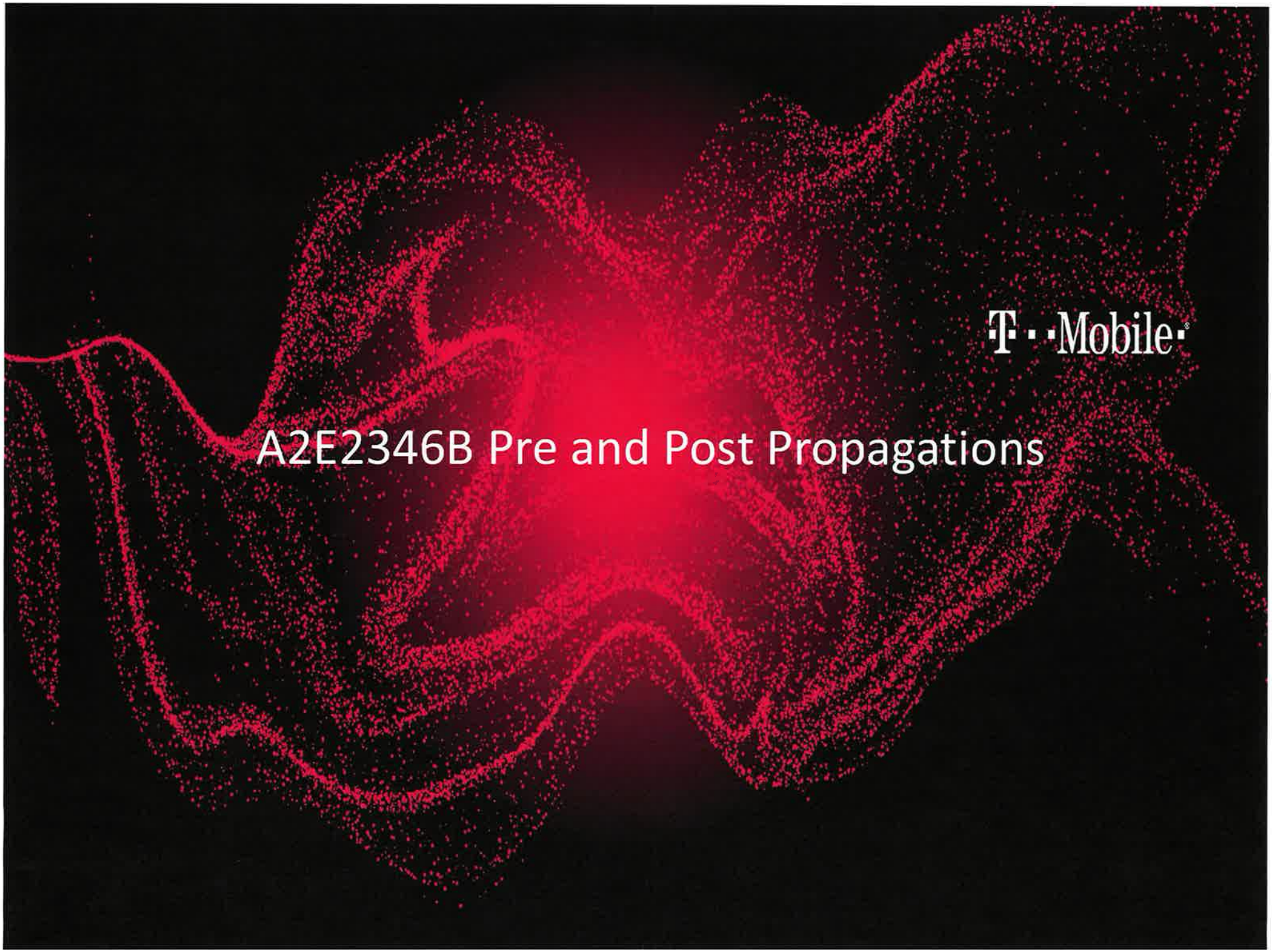
The only items showing are west of candidate B; they are all Vertical Bridge locations with heights of 20-28ft. These are not usable.

I'm not aware of any other viable options for candidates in the area. I also believe that is why this tower is even being considered.

Candidate B will improve coverage and capacity on SR528, and CR407.

Respectfully,

Jason Paulley
RF Engineer, T-Mobile US


T··Mobile·
A2E2346B Pre and Post Propagations

Existing and Proposed Sites

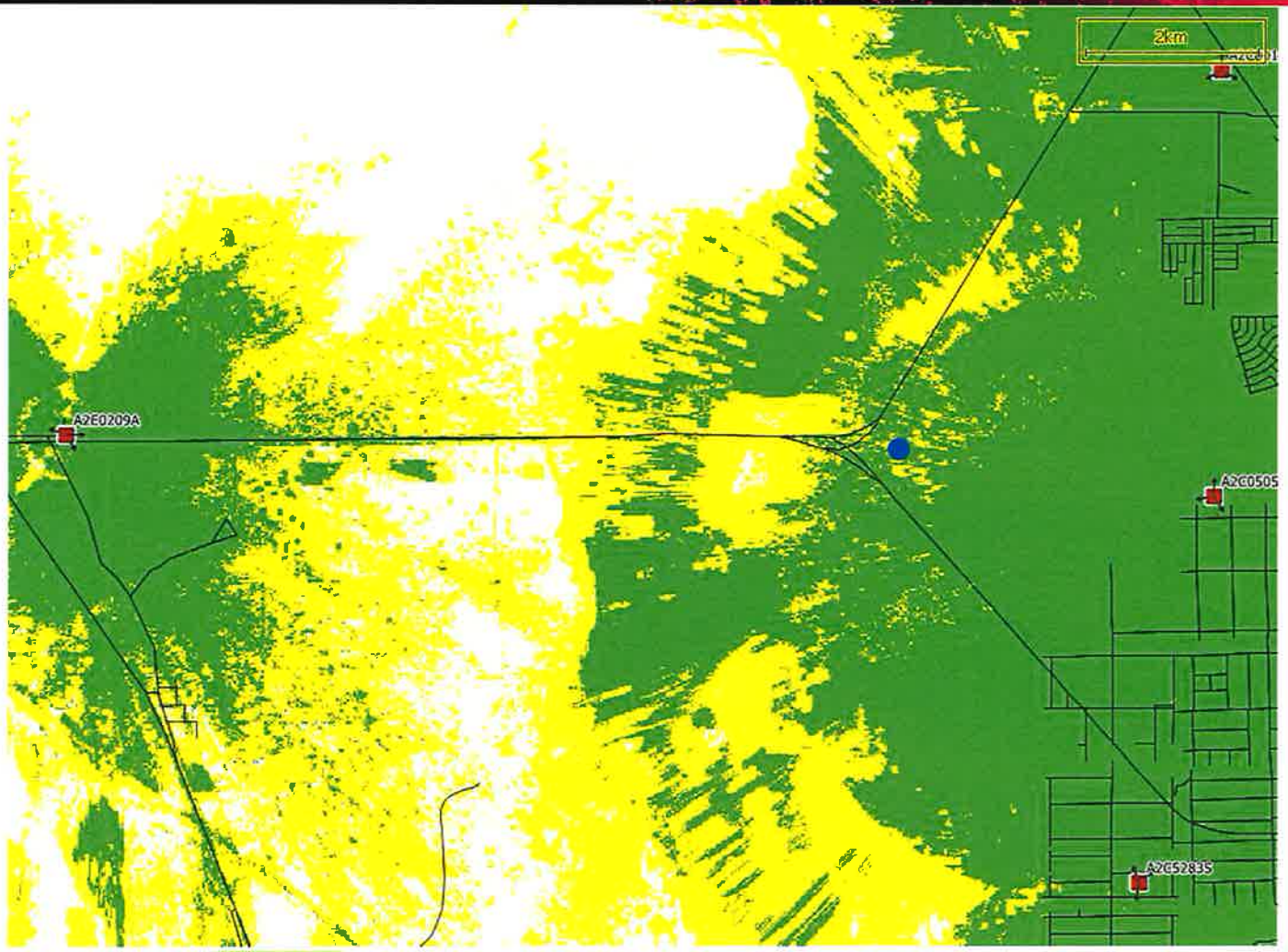
Proposed site:

A2E2346B	Lat: 28.45126	Long: -80.87084	ACL: 180ft

Existing sites:

A2E0209A	Lat: 28.453338	Long: -80.968388	ACL: 245ft
A2C0019A	Lat: 28.491307	Long: -80.832518	ACL: 116ft
A2C0505A	Lat: 28.446833	Long: -80.833311	ACL: 205ft
A2C5283S	Lat: 28.40651	Long: -80.84217	ACL: 200ft

4G Coverage Without A2E2346B
Mid-Band (B41-2500MHz) LTE Service Map (RSRP)



Proposed Site

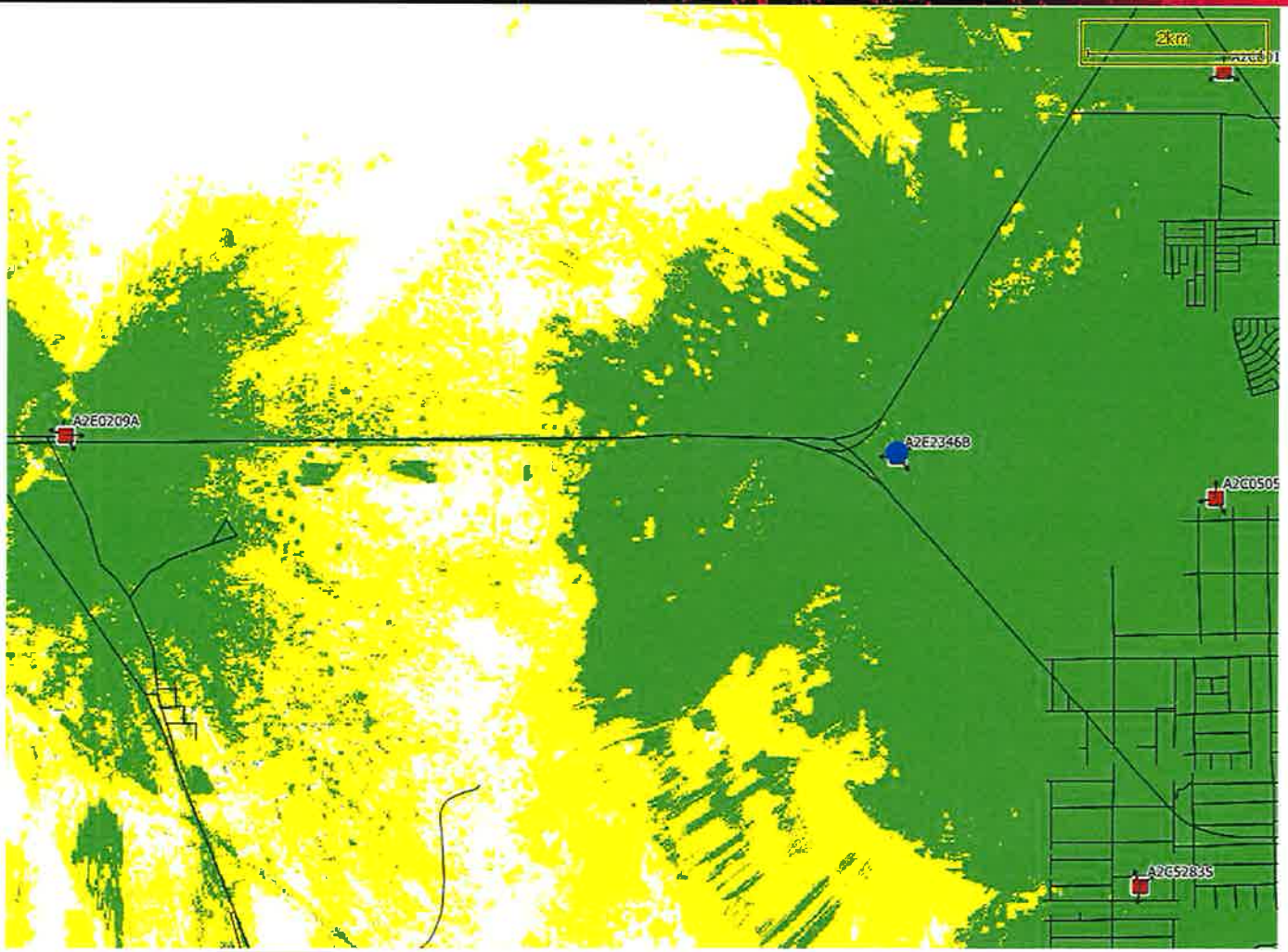
Existing Sites

Reliable 4G In-Building Residential Coverage (>= -97 dBm)

Reliable 4G In Vehicle Coverage (-97 > X > -105 dBm)

T··Mobile·

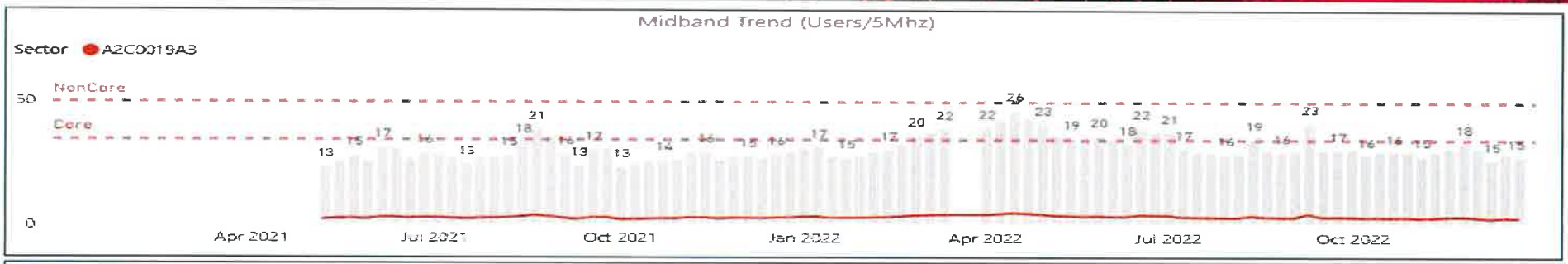
4G Coverage With A2E2346B
Mid-Band (B41-2500MHz) LTE Service Map (RSRP)

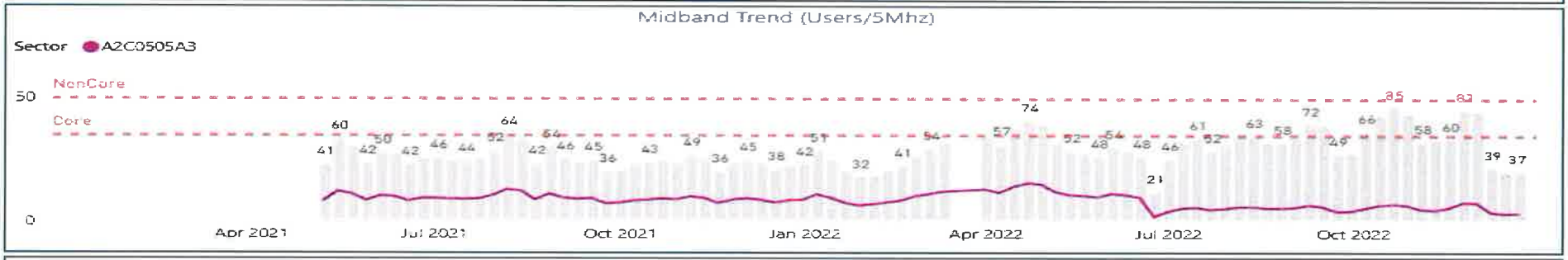


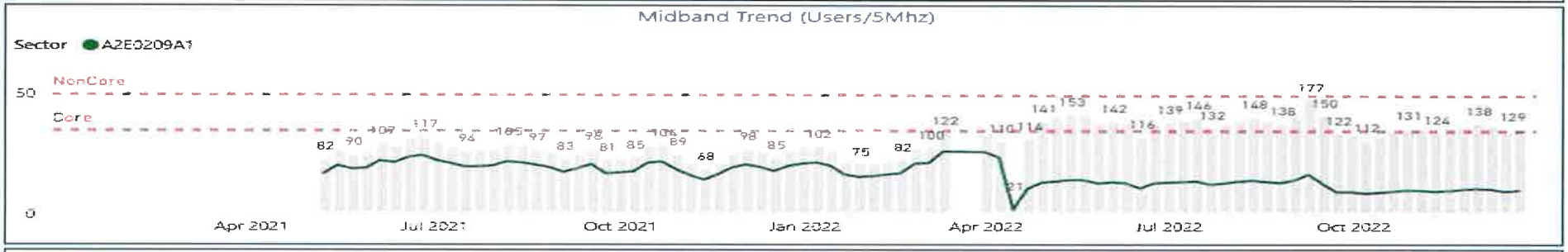
- Proposed Site
- Existing Sites
- Reliable 4G In-Building Residential Coverage (>= -97 dBm)
- Reliable 4G In Vehicle Coverage (-97 > X > -105 dBm)

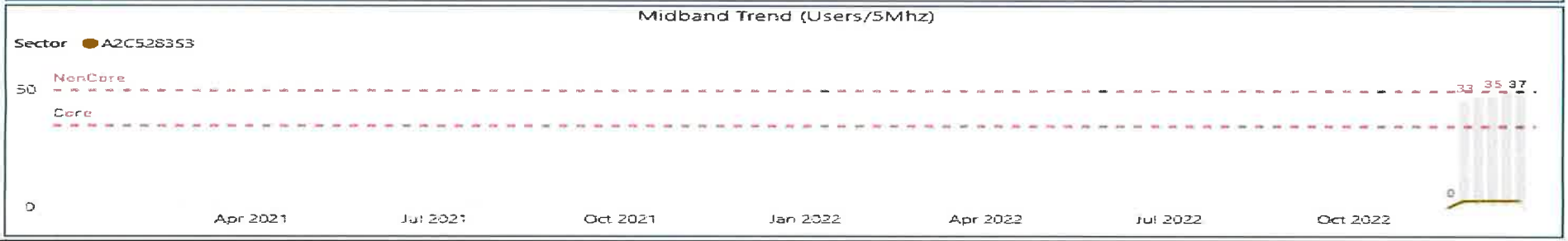
T··Mobile·

Existing Sector Capacity volume; A2E2346B will offload these









T··Mobile·


Thank You