

July 5, 2022

Planning & Zoning Board
Town of Chester
1786 Kings Highway
Chester, NY 10918

Attention: Donald Serotta

Don,

I cannot attend the July 6th Planning Board meeting due to a previous commitment.

However, I have included a brief summary of my review of the documents supplied by ARX/Verizon regarding the potential new cell tower location at Walton Park.

I will reach out to Verizon to attempt to obtain some clarity on items I have identified.

Regarding the Exhibits provided here are my comments for most of the Exhibits that were provided.

Exhibit A: Radio Frequency (“RF”) Engineering Necessity Case (Walton Park) dated May 23rd, 2022, by Wasif Sharif.

The report stressed capacity but also referenced the site was needed for coverage improvements to support the 4G LTE network.

For the RF Engineering Necessity Case only two frequency bands were used that Verizon has licenses which were included in Exhibit F. Throughout the document no reference was made to the other frequency bands used or available for use by Verizon, There was no reference to 5G for this potential site or the surrounding sites even though the 5G antennas were included in Exhibit D and included in the Site Safe Report in Exhibit C.

The RF Engineering Necessity Case referenced that three metrics for capacity were used and those being FDV, ASEU and AvgAC.

Only two existing cell sites used by Verizon were referenced in the RF Engineering Necessity Case while 5 sites and maybe more were included on the reference map surrounding the potential new site.

The two sites included in the RF Engineering Necessity Case were Neptune and Silvertail.

For the Neptune site only one sector was referenced, alpha. The report only used the 700MHz and AWS frequencies for FDV and ASEU. AvgAC information was not provided. However, for the plots provided the X axis is very confusing due to the intermingling of dates and this needs to be clarified since graphs currently cannot be used to support a need.

Regarding the Silvertail site the alpha was referenced. The report also only used the 700 and AWS frequencies for the FDV. ASEU and AvgAC information was not provided. However, for the plots

provided the X axis is very confusing due to the intermingling of dates and this needs to be clarified since graphs currently cannot be used to support a need.

Coverage maps were provided for the 700MHz and 2100MHz frequency bands. The 700MHz coverage maps show the proposed Walton site having the ability to offload Neptune A

The 2100MHz coverage map appears to show improved coverage with the inclusion of the site new Walton site.

However, there was no reference as to what was used to create the coverage plots making any conclusion difficult to determine.

The other frequency bands used or available for use by Verizon were not shown. With the information provided I cannot determine why only the 700MHz and 2100MHz frequency bands were used for the coverage maps.

There was no indication of where the planned future sites, search rings, for the area are. There is a second site being pursued however its location is not on the coverage plot(s) provided.

Exhibit B: Site Plan

The use of dual band RRHs were referenced to be used and it should be clarified what frequency bands will be used at the site.

The future use of 9 more antennas by Verizon was indicated. However, the antennas represented in the drawing have similar dimensions as compared to those shown in Exhibit D. It is suggested that Verizon provide a drawing that shows the antennas being used as well as identify the frequency band they intent on using at the site.

The site drawing only showed one operator, Verizon. It is advisable that the drawing include the locations for all the other possible tenant antennas and or their respective locations on the tower. It is also advisable to confirm that a structural load analysis was completed with all the potential tenants.

In addition, the FAA report for the potential Walton site was referenced as being a Stealth Site. If the intention is to make the Walton site a Stealth Site then it is advisable that Verizon/ARX identify if this will or will not happen.

Exhibit C: SiteSafe Site Compliance Report.

The report from SiteSafe indicates that the RF emissions at ground level are in compliance with FCC guidelines.

The report included all the possible frequency bands used by Verizon including 5G technology.

Exhibit D: Antenna Manufacturer Specifications

In this exhibit two antenna types were identified. The NHH-65C-R2B which has 6 antenna ports per antenna. The second antenna identified as the Samsung C-Band 64T64R Massive MIMO antenna having 64 antennas inside it. The C-Band MIMO antenna is typically used for 5G services.

Exhibit E: Radio Frequency Certification of Non-Interference

I suggest Verizon update their memo to also reference 5G services. In addition, there should be a note added saying Verizon will not cause interference with any first responder radio system.

It is also suggested that Verizon be the primary contact for all future collocators with regards to interference issues.

Exhibit F: Federal Communication Commission Licenses

This just referenced all the frequency bands Verizon is available to utilize at the potential Walton site which includes more frequency bands than the 700MHz and 2100MHz bands referenced in Exhibit A.

Exhibit H: FAA Determination of No Hazard to Air Navigation

The FAA report Lat/Long matches the site drawing coordinates. The FAA report was run at 150 AGL while the top of the tower is 154 feet.

The FAA report on page 3 indicates that the site will be a 150 foot stealth monopole with both Verizon and AT&T collocating on it. The FAA report also included that the tower will be built for 4 towers however I believe this is a typo and should be tenants.

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Clint Smith PE

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