

January 6, 2020

The workshop portion of the meeting was called to order at 7:30 p.m. by Ms. Daly Vice-Chair.

**ROLL CALL:**

**Members Present:**

Ms. Daly  
Mr. Aschenbach  
Mr. Lucas  
Mr. Quinn  
Mr. Salomon

**Members Absent:**

Mr. Marotta  
Mr. Ashrafi

**Alternates Present:**

Mr. Savino  
Mr. Rees

**Alternates Absent:**

None

Also in attendance: Mark Rothman, Esquire, Kathy Lenahan, Board Administrator

**COMMUNICATIONS:**

None

**MINUTES:**

None

**RESOLUTIONS:**

None

**OLD/NEW BUSINESS**

None

The workshop portion of the meeting concluded at 7:32 p.m.

**PUBLIC PORTION:**

A public meeting of the Cranford Board of Adjustment was called to order by Ms. Daly on January 6, 2020 at 7:45 p.m. in Room 107 of the Municipal Building, 8 Springfield Avenue, Cranford, New Jersey. Ms. Lenahan announced in accordance with the terms and conditions of the Open Public Meetings Act, the Westfield Leader or Star Ledger has been notified and the agenda posted in the municipal building as required.

Ms. Daly explained the protocol, purpose and procedure that will be followed during the hearing.

3. **Application # ZBA 19-010 - Continued from December 16, 2019**  
**Applicant: New York SMSA Limited Partnership**  
**d/b/a Verizon Wireless, T-Mobil Northeast LLC**  
**New Cingular Wireless PCS, LLC**  
**Union County College**  
**1033 Springfield Avenue**  
**Block: 121 Lot: 2.01, E-1 Zone**

**Applicant is requesting preliminary and final site plan approval, a d(1), d(3) and a d(6) variance for a wireless telecommunications facility §255-37l(5) & (6), plus numerous c(2) variances. A variance for height where the maximum height permitted is 70 feet, and 140 feet to the top of the tower and 148 feet to the top of the concealment branches is proposed §255-37l(10)(a), a variance for setback where the minimum required setback to the closet property line is 185 feet and 112 feet 9 inches is proposed §255-7l(10)(b)(1), a variance for separation from the nearest residential unit where the minimum is 444 feet and 229 feet 7 inches is proposed §255-37l(10)(c) and if so required, variances to permit more than one principal use on a lot, for the continuation of the existing non- conforming lot area §255-37G(1)(c) and open space ratio §255-z 37G(1)(e).**

Gregory Meese, Esq. appeared. Stated Mr. Pierson testified at the last meeting about the deficiencies in coverage. Stated there was a question regarding the meaning of a significant gap and he has provided a legal memorandum with respect to the issue. Stated the carriers should be able to provide service to the level they desire and feels Mr. Pierson has demonstrated there are deficiencies in service for a large geographic area for each of the carriers. Stated Mr. Pierson will continue his testimony and reminded him he is still under oath.

Mr. Pierson testified to the following as posed by Mr. Meese:  
One of the board members had a question regarding the height of the trees and the propagation of the models. Stated that the model does have an entry for height. Reviewed the traffic by the site. Presented Exhibit A-18 as the NJ Dept. of Transportation daily volume from January 23, 2013 to January 25, 2013. Stated it is County Road 615 - Springfield Avenue between Romore Place and Park Drive. Reviewed the document. Stated average daily traffic is approximately 12,109. He reviewed the Cranford zoning map to see if there were any other permitted zones where the facility could be located. Stated the yellow zones on the map are where wireless sites are permitted. Nearest zones are about 2 miles away. None of these zones would fix the gaps they have identified. Also reviewed the Westfield zoning map. Marked Cranford zone map as Exhibit A-19 and Westfield zone map as Exhibit A-20. Listed several properties where inquiries were made to property owners for possible site of cell tower. These owners were not interested in leasing space. They are: 506 Springfield Avenue, 1100 East Broad Street, 831 Springfield Avenue, 515 Springfield Avenue, 419 Springfield Avenue, 524 Springfield Avenue, 250 Gallows Road, County Park Drive, Cranford Swim & Tennis Club, 1033 Springfield Avenue. The College was not originally interested, but that changed in 2017. Presented a list of parks, Exhibit A-21, that shows restrictions due to Green Acres. He does not know of any other locations for this facility. Does not foresee any interference with any other devices in the area. He has studied the emissions from the facility and believes the facility complies with the FCC standards. Described the calculations he performed.

Presented a report titled *Analysis of the Electromagnetic Environment in the Vicinity of a Proposed Wireless Communication Tower* dated April 17, 2019, marked as Exhibit A-22.

Questions posed by the Board ascertained the following:

Verizon has some small cells which are designed to cover a small area; about 1000 feet of coverage. Small cells need to be mounted onto something and still need an antenna in the air. Finding locations in Cranford and Westfield are a challenge. A Site Acquisition Specialist will testify at a later time. A propagation map is a model created by each carrier with multiple drive tests. He confirms the accuracy of the model. The map is accepted in Federal and State courts. There are other sites from a radio perspective that would work on the college site; the tower height might change. You need an area clear of obstructions. The rooftop site would not resolve the coverage deficiency. The antennas need to be a certain height, if you lower them, the coverage shrinks and you need more of them.

Questions posed by Mr. Simon to Mr. Pierson ascertained the following:

He was contacted in late 2017 by Verizon and in 2018 or early in 2019 by AT&T & T-Mobile for this project. At the moment his revenue is 100% from Verizon. He does other work for the carriers. He has not had any formal education since he retired in 2017. He was an employee of Verizon at one time. He is here as an independent radio frequency consultant. He testified for other counties in New Jersey as a board expert. All information for the propagation maps is obtained from the engineers for the providers. He had questions on the water tank for AT&T being accurate. Reviewed drive test data but has not provided it to the Board to review. He attended meetings that UCC requested from Verizon. He provided the RF section of the proposal by Verizon. He has not asked T-Mobile or AT&T why they have not connected to the in-building system at UCC. The response to the RFP did not include anything off the main buildings. Westfield 4 is the Verizon Wireless site name and W1128 is the AT&T project id. He did not ask Verizon why they are not on the generator for the in-building system. He has no information from the Cranford Swim application. Stated there were some items from the RCC report that were not detailed and had some inconsistencies. Page 22 of the Needs Assessment shows where the monopole site would be located. The bid submission from Verizon was for a 130-foot monopole with four carriers, the application is for 140-foot monopole. The tree survey shows the trees are taller than expected. He did not do an assessment of the removal of any trees. He has not tested the coverage inside the building. He has not studied the traffic patterns of UCC students or facility. He has no knowledge of whether or not an in-building system at the Observatory could be installed. This is an application for coverage only not capacity. He has no information about lower frequencies bands and customer demands in the Cranford/Westfield area. AT&T does more at the 1900 frequency. A typical smart phone can access low and high frequencies. Lower frequencies will travel further in suburban areas than higher frequencies. There are more FCC licenses at the higher frequencies than at the lower frequencies. He believes all the carriers have a gap in coverage on the UCC campus. Other than the sites listed in his report Exhibit A-10, he has no information on any sites that are being pursued near Cranford by any of the carriers. He is not aware of any other wireless applications in Cranford. There will still be gaps to the east and west if this application is approved and he is not aware of any plans at this moment to cover those gaps. There are times where a call can be made in an area of white, it will just be less reliable. He has looked at signal strength around the campus but has not performed drive tests. He has not researched any customer complaints for the area. The information that is put into the tool is proprietary information. There is overlap in coverage between existing and proposed. He did not calculate the percentage of duplicated coverage. He does not know if any of the carriers have propagated at lower heights. The Library was shown with a 60-foot height (Exhibit J) and would only get a 1/3 of the coverage. The Library is about 1500 feet away from the proposed site. He does not know if the College would be interested in a small cell installation. Does not know who would own the tower. Negative 96 or 97 would show up as white on the maps. The signal strength is equal to or greater than minus 95 on the maps with the proposed coverage.

Ms. Daly asked if there was anyone in the Public that will not be able to attend the meeting next week and would like to ask this witness a question, the following appeared:

Karen Segal – 25 Cornell Road – Asked about 5G and the radius of coverage. Also asked about 4G being obsolete.

Mr. Pierson stated 5G is a different radio. It depends upon the frequency for the radius. You can transmit 5G from a 4G tower. There are DAS nodes on the streets and the towers are not technology sensitive.

No one else appeared and this portion of the hearing was closed with the matter referred back to the Board.

Ms. Daly stated this hearing will be continued next Monday, January 13<sup>th</sup>. The Workshop will be at 7:30 p.m. and the hearing will begin at 7:45 p.m.

**PUBLIC PORTION:**

None

**CONCLUSION:**

There being no further business, a motion to adjourn the meeting was regularly made, seconded and passed. The meeting concluded at 10:40 p.m.

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Daniel Aschenbach, Secretary