Chairman DeRochi called the meeting to order at 7:34 p.m. and read the opening statement which affirmed that adequate notice of the meeting had been posted and sent to the officially designated newspapers.

**BOARD MEMBERS PRESENT:** Chairman DeRochi; Vice Chairman Smith; Mr. Fedun; Mr. Kabis; Mr. Wu; Mr. Lopez-Lopez, Alternate #1; Mr. Blodgett, Alternate #2; Mr. Patel, Alternate #3; Mr. Sudol, Alternate #4

**ALSO PRESENT:** Mark Peck, Esquire, Board Attorney; Emily Goldman, Board Planner; Jason Cline, Board Engineer; Dr. Bruce Eisenstein, Board RF Engineer; Joseph Palmer, Zoning Officer

I. **SALUTE TO THE FLAG**

II. **RESOLUTION**

*Case BA-05-19  Applicant: Alexander & Natasha Wolfson Trustees*

Block 31003 Lot 22 – 71 Colfax Road
Bulk Variances

A motion to memorialize the resolution was made by Mr. Fedun and seconded by Mr. Wu. The motion carried on the following roll call vote:

Ayes: DeRochi, Fedun, Wu, Lopez-Lopez, Patel and Sudol
Nays: None

III. **MINUTES**

*June 18, 2019 – Regular Meeting*

A motion to approve the minutes was made by Mr. Kabis and seconded by Mr. Lopez-Lopez. The motion carried on the following roll call vote:

Ayes: DeRochi, Smith, Fedun, Kabis, Wu, Lopez-Lopez, Blodgett, Patel and Sudol
Nays: None

*July 16, 2019 – Regular Meeting*

A motion to approve the minutes was made by Mr. Lopez-Lopez and seconded by Mr. Wu. The motion carried on the following roll call vote:

Ayes: DeRochi, Fedun, Wu, Lopez-Lopez, Blodgett, Patel and Sudol
Nays: None

*July 30, 2019 – Special Meeting*

A motion to approve the minutes was made by Mr. Fedun and seconded by Mr. Kabis. The motion carried on the following roll call vote:

Ayes: DeRochi, Fedun, Kabis and Lopez-Lopez
Nays: None

IV. **APPLICATION**

*Case BA-04-19  Applicant: Sector Site LLC and New York SMSA Limited Partnership d/b/a Verizon Wireless*

Block 25001 Lot 16 – Camp Meeting Avenue
Submission Waivers, Conditional Use Variance, Height Variance, Bulk Variances and Preliminary and Final Site Plan
Expiration Date – 11/27/19
Affidavit of Notification and Publication Previously Found to Be In Order

Frank Ferraro, Esquire represented the applicant. The additional information that was requested at the last meeting has been provided. The generator has been placed inside the building, additional RF materials have been provided and the tracking pad will be removed after construction so there won’t be a parking space within 50 feet of the property line.

David Stern, the applicant’s RF Engineer, remains under oath. The “Supplemental Report” prepared by VComm dated September 3, 2019 was marked as Exhibit A-7. The “On Air Drive Test” prepared by VComm dated August 26, 2018
(should be 2019) was marked as Exhibit A-8. Mr. Stern discussed the maps in Exhibit A-7. Map 6, which is identical to Exhibit A-3, shows the coverage on top of a topographic map that shows the hill to the west that will block the signal. Map 7 is the single site version that shows what the site looks like without the existing sites around it. The site was designed as a three sector site with a sector pointing north, east and south. A sector is not proposed to be installed pointing to the west because the ground elevation goes from the 200’s up to the 400’s approximately a half mile from the site that would block the signal. The map shows there is also an area to the north of the site that is blocked by a hill. Map 8 shows the coverage at a height of 110 feet, 120 feet and at 130 feet. As the antenna height drops the coverage drops. Based on the analysis a centerline of 130 feet is needed. The applicant contacted the High School about a small or mini cell on their property and the Board of Education expressed interest in the construction of a macro cell. Subsequently, the Board of Education withdrew the project due to objections from parents. Johnson and Johnson had been approached for a small cell concept and they were not interested. Map 9 shows the coverage area of a full sectored site in the Blawenburg Church steeple. The area of coverage would be less than a mile and includes the high school but another facility would be needed to cover the gap to the north. Map 11 shows the population density with the proposed coverage overlay using census data. Verizon Wireless cannot share information with regard to customer complaints since it is confidential.

Mr. Stern referenced Exhibit A-8. An on air drive test of the area was performed on August 26, 2019 by using cellular phones placed on the passenger seat. The green or blue on the maps shows good coverage. The 2100 MHZ On-Air RSRP map shows that the dominant in the high band for Verizon is red and below. The 2100 MHz On-Air SINR map shows the signal interference to noise ratio. This shows that even if there isn’t as much signal as they need there may be a good quality signal where there is less noise or interference. The area of high band is a little better in this instance. Mr. Stern discussed the 2100 MHz On-Air PCI map which shows which sector is covering the area. There was discussion on how the map shows that they are picking up other sites because there is no dominant server in the area. There are coverage issues in the areas of the very high capacity usage. The sites are shared with other carriers but the signals are not. The 700 MHZ On-Air RSRP map shows coverage with the low band. Eighty percent (80%) of Verizon’s 4G capacity is at the high band spectrum and twenty percent (20%) is at the low band spectrum. The site is being constructed to fill in the high band coverage in this area. The 700 MHz On-Air SINR map is similar or worse which is a function that the 700 signal travels farther and there begins to be interference between the other sites. A dominant server is needed in the area to take over. The quality is not as good as when you are closer to the site. The additional analysis and testing that was done does not change any of the prior testimony regarding the need for this site. It is his opinion that there is still a significant gap in coverage that Verizon needs to address in both the high band and the low band. The tower still needs to be at 130 feet centerline height to cover as much of the gap as possible. With respect to the priority one Blawenburg Church it is not an adequate alternative for the proposed site because it doesn’t cover the gap. Verizon is obligated to provide reliable coverage in all its FCC license bands. The proposed facility is both high and low band.

Dr. Eisenstein cautioned the Board that the PCI map is confusing and is not usable.

Mr. Lopez-Lopez asked if a lower tower at the proposed site and at the Blawenburg Church location would provide the coverage they need. Mr. Stern testified it would not be sufficient and he would not be able to cover the Johnson and Johnson site. He does not know if he would be able to install antennas or replace the structure at the Church.

In response to Mr. Blodgett, Mr. Ferraro said that although the Church is listed as a priority location in the Ordinance, Verizon does not have the Church’s approval to install antenna.

Mr. Stern testified that dropping the height of the tower will reduce the ability to collocate other providers.

Dr. Eisenstein explained that if you are in an environment with extremely low noise and extremely low signal the signal to noise ratio could be adequate but the signal strength could be below the threshold the handheld device can handle. Even if you have a good signal to noise ratio it is useless because your device has certain specifications and they are below the specification level for the device. What is demonstrated by both the propagation plots and drive test data is there is a need for the site in the area. The drive test was done on a sunny day so it shows the best signals that they could get.

Mr. Ferrara stated that the application is for a tower of 135 feet. They are not asking for any height beyond that. The foundation will be built so that in the future if the Board hears an application and they are convinced that a carrier needs 145 feet instead of 125 feet it could physically be done and a new tower wouldn’t be needed.

Mr. Peck said another carrier on this site would need an amended site plan and height variance.

Chairman DeRochi opened the meeting to question Mr. Stern.

Ms. Penny Pariso, 404 Skillman Road, asked if Map 8 of Exhibit A-7 could be overlaid onto a map of the Township showing all the preserved farmland and conservation easements rather than using the census data. She asked about coverage on Route 518. Mr. Stern testified there is currently coverage on Route 518 and the proposed site would add coverage to Route 518. Ms. Pariso asked if Verizon asked Gibraltar if they could put antenna on their existing water tower. Mr. Stern said they have antenna on the Zion tower which doesn’t provide adequate coverage in the area.
Scott Maglioletti, 47 Hillside Terrace, asked about the Church site and the Gibraltar site. Mr. Stern said the Church site was not considered because it is too low and the Gibraltar site was not considered because it is too far away. The antennas that are on the Zion tower do not provide an adequate signal. Johnson and Johnson is a second priority location and they have not responded to Verizon’s request. Verizon has approached other Johnson and Johnson sites and were denied. Mr. Ferrara stated that Verizon is not under any obligation to make any good faith efforts for alternative sites because they are a permitted conditional use in the zone. Despite that, Verizon has reached out to Johnson and Johnson.

Linda Rose, 37 Hillside Terrace, asked why the tower is proposed at this location when there is a hill to the north, a hill to the west and the subject site is in a hollow. She asked if there was any testing with 5G. Mr. Stern replied that they had not. She asked why they only used Galaxy phones in their testing and if it was possible there could be poor service in the area for the specific phone. Mr. Stern replied that the Galaxy is the standard test equipment they have been using for years to analyze 4G networks. He was told there were parental objections to locating it at the high school.

John Ferrante remains under oath. Mr. Ferrante described the revisions that were made to the site plans (last revised 8/28/19). The Title Sheet (T1) was revised to show the updated lot coverage calculations since the generator was placed inside the building and updated FAR calculations. The FAR calculations are shown twice; once assuming all the existing buildings on the site are used as offices and then based on the actual office square footage within the building. Sheet SP1 was revised to add the stream corridor and stream corridor buffer. Eighty percent of the existing facility on this property is within the stream corridor. A variance is being requested since the tower will be located within the stream corridor. The colored rendering of Sheet SP1 was marked as Exhibit A-9. SP1 shows the emergency generator was moved into the building. Sheet SP2 was revised to show the height of the building which is 26 feet to the ridgeline. The emergency generator was moved indoors and a dedicated room for the generator was created. The building is approximately 2,000 square feet and will house all the radio equipment. Each carrier and the generator will have its own room. The gravel road will be used for construction and then removed once construction is complete. The generator room will be constructed with two-hour fire rating which meets the NJ Building Code. The two existing Maple trees were added to the plan. Information for the no trespassing sign and contact in case of emergency of sign has been provided. The signs will be posted on the equipment door. There is no fencing proposed around the monopole facility but one will be provided if required by the Board.

Mr. Ferrara said a copy of the deed was provided that shows the proposed improvements are permitted within the railroad right-of-way.

Ms. Goldman stated that installing the plantings across the easement precludes ingress and egress. Mr. Ferrante testified they could move the plantings closer to the pole since the generator was moved inside.

Mr. Ferrante testified that the stream corridor variance could be granted without any danger due to flooding, erosion or drainage issues. The proposal is for a 6 foot diameter foundation and minimal addition of impervious area. The variance can be granted without any detriment to the public. The location of the pole is not a direct impact on the stream.

There was discussion about the wetlands and buffers. The applicant is confident there will be a 50 foot buffer requirement. If the required buffer is more they will apply for a transition area permit. A waiver is being requested from providing sidewalks along Camp Meeting Avenue since they would be within the wetland area and would require a permit. The applicant agrees to comply with Mr. Bartolone’s comments.

Mr. Cline testified that the applicant has done their water quality requirements, their disturbance is relatively low and they have avoided the wetland buffers as much as is feasible.

Chairman DeRochi opened the meeting to question Mr. Ferrante.

Ms. Pariso asked if there was any possibility to install mature landscaping along the property frontage to block the view. Mr. Ferrante suggested relocating the landscaping proposed in the rear subject to the approval of the landscape architect and landowner.

David Karlebach remains under oath. Mr. Karlebach gave the Board his qualifications and was accepted as an expert witness. The property is irregularly shaped and is 7.76 acres in size. Much of the lot is encumbered with equipment are not the only land uses on the required 20,000 square foot land area. The land area dedicated for this use is within the stream corridor. Eighty percent of the existing facility on this property is within the stream corridor. A variance is being requested since the tower will be located within the stream corridor. The colored rendering of Sheet SP1 was marked as Exhibit A-9. SP1 shows the emergency generator was moved into the building. Sheet SP2 was revised to show the height of the building which is 26 feet to the ridgeline. The emergency generator was moved indoors and a dedicated room for the generator was created. The building is approximately 2,000 square feet and will house all the radio equipment. Each carrier and the generator will have its own room. The gravel road will be used for construction and then removed once construction is complete. The generator room will be constructed with two-hour fire rating which meets the NJ Building Code. The two existing Maple trees were added to the plan. Information for the no trespassing sign and contact in case of emergency of sign has been provided. The signs will be posted on the equipment door. There is no fencing proposed around the monopole facility but one will be provided if required by the Board.

Mr. Ferrara said a copy of the deed was provided that shows the proposed improvements are permitted within the railroad right-of-way.

Ms. Goldman stated that installing the plantings across the easement precludes ingress and egress. Mr. Ferrante testified they could move the plantings closer to the pole since the generator was moved inside.

Mr. Ferrante testified that the stream corridor variance could be granted without any danger due to flooding, erosion or drainage issues. The proposal is for a 6 foot diameter foundation and minimal addition of impervious area. The variance can be granted without any detriment to the public. The location of the pole is not a direct impact on the stream.

There was discussion about the wetlands and buffers. The applicant is confident there will be a 50 foot buffer requirement. If the required buffer is more they will apply for a transition area permit. A waiver is being requested from providing sidewalks along Camp Meeting Avenue since they would be within the wetland area and would require a permit. The applicant agrees to comply with Mr. Bartolone’s comments.

Mr. Cline testified that the applicant has done their water quality requirements, their disturbance is relatively low and they have avoided the wetland buffers as much as is feasible.
a monopole but the applicant will consider a tree pole if the Board deems it appropriate. The application meets the height requirement of 135 feet in the cellular antenna section of the ordinance but does not meet the height requirement of 45 feet in the LM zone. The structure will be visible from portions of Camp Meeting Avenue but the pole is located in the rear of the property behind a building. The structure that will house the equipment is 26 feet in height where 15 feet is permitted.

Mr. Karlebach discussed the proofs for granting the conditional use variance. The Courts have held that a variance for a conditional use is more like that for a permitted use and therefore the standards for determining whether to grant a conditional use variance are less burdensome. The Court opined that conditional uses, even when they do not comport with the stated conditions, are essentially compatible uses in the zone. The focus of the Board must be on the site and whether or not the site continues to be appropriate for the use.

Mr. Karlebach testified that the site remains appropriate for the use. The site is centrally located within the carrier’s service deficiency area and enables the carrier to remedy the service deficiency using a second priority location. The site is exceptionally large which allows for increased setbacks to Camp Meeting Avenue. All licensed carriers can fit into a much smaller area than the required 20,000 square foot lease area. The equipment compound is situated in the existing vacant building which will accommodate any collocators. The site provides the greatest setbacks possible while acknowledging the physical features of the site (wetlands, stream corridor, etc.). Mr. Karlebach referenced a Viewshed Analysis Map prepared by Clarke Caton Hintz which was marked as Exhibit A-10 and described the existing conditions that buffer the proposed facility from the high school. It is questionable whether a height variance is required since the wireless ordinance permits heights up to 135 feet while the height limitation in the zone is 45 feet. Mr. Karlebach opined the wireless ordinance should prevail because it is tailored specifically for this use. In the event that a height variance is required there are sufficient reasons for granting the variance. The height of the antennas at this location is necessary to effectuate the use. If the antenna height cannot be achieved then the system won’t function properly or at all and Verizon Wireless cannot fulfill its federal mandate of providing seamless reliable service. In terms of the negative criteria there is no substantial detriment to the public good. The negative criteria pertaining to wireless communication facilities implicates aesthetics. The equipment area has no visibility from off-site locations and the nearest homes are 490 feet away.

Mr. Karlebach went through the photo simulations. The Photo Simulation Report dated September 6, 2019 was marked as Exhibit A-11. The locations for the photos were chosen in conjunction with the Board Planner. The crane was at a height of 150 feet and the boom was at 135 feet. The photos show the crane was not visible from the intersection of Fairview Road and Grandview Road, from the intersection of Servis Road and Hollow Road, from the Lavender Farm driveway (Route 601), from 191 Hollow Road, from the High School on Route 601, from the train tracks on Hollow Road, from 164 Van Zandt Road, from Blawenburg Village Square, from Larocque Circle in the vicinity of the dog park and from 30 Hillcrest Court. The crane was visible from 37 Hillside Terrace, from 63 Fairview Road, from the site driveway at Camp Meeting Avenue, from the Post Office on Route 601, from 235 Route 518, from Camp Meeting Avenue at the High School entrance and from 933 Route 601. Photos were generated using Photoshop to impose both a monopole and a tree in the locations that the crane was visible. The site benefits from a combination of the mature vegetation, rolling topography, large lot zoning and rural traffic system. Of the 17 viewpoints that were analyzed, the crane was visible from seven. The greatest visibility occurs from locations north of Camp Meeting Avenue. It was only visible from one location south of the site.

Mr. Karlebach testified that the facility does not generate any noise, vibration, odors, glare, dust, fumes or any other objectionable influences. The base station is an unmanned facility. There is no traffic impact. The use requires minimal demand on municipal services. There is no substantial impairment to the zone plan. The application complies with many of the conditional use standards. The many public benefits that are conferred by improved wireless communication service in this area outweigh any perceived detriment associated with the variance sought. The proposal allows for the safe and efficient operation of the system without degradation to the environment and without causing any real damage to the character of the area.

The Board questioned Mr. Karlebach. The diameter of the pole may have to be a little larger with a tree pole. The diameter of a monopole would be about 6 feet and tree pole would be about 8 feet. The lowest branches on the tree would be above the existing building. If the Board choses the tree pole it could be extended.

Mr. Karlebach testified that the number of principal buildings is an existing non-conforming condition proposed to be continued but not exacerbated. It is common to have a telecommunication use occur on the same property with other existing uses.

The Board continued their questions. SectorSite/Verizon is leasing the entire garage building so they will have control of the building. There are currently two uses on the property; a dwelling and manufacturing offices. The garage building will become a utility use. With the abandonment of the dwelling there will remain two uses.

Mr. Peck and Ms. Goldman listed the additional variances that are required based on the testimony. They include the stream corridor, the minimum leased area and the garage building height.
Mr. Ferraro said they are asking for exceptions/waivers from sidewalk, street trees and the conservation easement. If the Board approves a tree pole, the branches may extend up to 5 feet above the top of the tower so they would need a height of 140 feet.

The Board agreed there should be a fence around the pole. The fence should be solid of neutral color to match the existing building and a minimum of 8 feet tall. Larger trees will be planted along the road frontage.

The meeting was opened to the public to question Mr. Karlebach.

Ms. Pariso asked how secure the tree limbs are so they don’t come off onto the railroad tracks. Mr. Ferrante testified it will meet the NJ Building Code requirements for the wind and ice loads. The branches/needles will have to be replaced over time but the basic structure will not be damaged. Ms. Pariso asked if there was any way to simulate what the pole would look like when the trees lose their leaves. Mr. Ferraro said there was not. Ms. Pariso asked if another height test could be done at the end of the fall season to see what it would look like when there are no leaves on the trees. Mr. Ferraro said there is no way they can do that.

The meeting was opened for public comment.

Ms. Rose, 37 Hillside Terrace, asked that Photo 3A be displayed. The tower is very visible from her backyard and will be more visible when the leaves are off the trees. No one has brought up the health effects of a cell phone tower. She knows the studies are iffy and the FDA won’t say cell phones are a health risk. The tower is very close to the high school. She asked if the parents, students and faculty of the high school know this is being built about 400 meters from the school. The NIH and the WHO have done studies and have said if you are within 400 meters of a cell tower you have 3 times the risk of getting cancer. The American Cancer Society says further study is needed. She travels all these roads and never has issues with dropped calls. She asked the Board to reconsider the variance.

Christina Magliochetti, 47 Hillside Terrace, said four of her children went through the high school and none of them complained about dropped calls or about not being able to get on the internet. She has never had a dropped call while she was driving around. She has connected to the school internet while sitting in the football stadium. There is no problem with the service around the school. The tower is destroying her view.

Doug Rose, 37 Hillside Terrace, said he didn’t get a letter. The room is empty because people in his neighborhood don’t know that this is before the Board.

Mr. Peck informed Mr. Rose that notice is statutory. Notice is published in the official newspaper of the municipality and a letter is mailed to all property owners within 200 feet of the site. It is State law and the Township and the Board cannot require anymore in the form of notice. The Board cannot turn down an application because people didn’t know about it. If the Board used that as a basis to reject the application the Board would be sued and would lose. Public opposition to a cell tower, in and of itself, is not a basis whatsoever for a Board to act.

Ms. Pariso stated that she is not happy with having a 135 foot tower out her front door. She has 14 acres of preserved farmland and from about 13.5 acres all she sees is the tower. She said she knows the Board isn’t allowed to use health as a deciding factor. She gets service in the high school. J & J probably doesn’t want it on their site because it is against company policy for employees to use their cell phone for any company communications. The map that she had prepared showed that about 60% of the land in the coverage area is conservation easement or farmland. It appears that the tower will cover approximately 120 to 140 houses. Other than not wanting it across the street she doesn’t feel like the applicant has proven there is an absolute desperate need in the area.

A motion to close the public hearing was made by Mr. Lopez-Lopez and seconded by Mr. Blodgett. The motion carried unanimously.

Mr. Ferraro summed the application. The application is a conditionally permitted use in the zone. The municipality has already determined this is an appropriate location for the use and what the appropriate height is. The applicant’s planner has provided testimony to address the conditional use standards they don’t meet. Mr. Stern’s testimony is that there is a gap in service and a need for a site in this area. With respect to health effects, the Telecommunications Act of 1996 says the Board cannot use perceived health effects as a reason not to approve a wireless telecommunications facility if it is FCC licensed.

Mr. Fedun said the Planning Board, by zoning this as a conditional use, has taken the argument out of the Zoning Board’s hands. The only control the Zoning Board has is what it looks like.

Mr. Lopez-Lopez said the only open item is whether it is a tree or a monopole. He prefers a tree.
Vice Chairman Smith said he was on the Zoning Board when the first cell tower came in. There were a lot of residents that came out and the Zoning Board ended up denying the application. They took the Board to Court and the Township lost. In that application it was prohibited in the zone.

Mr. Peck said the only question before the Board is on the deviations from the conditional use standards and whether the site can accommodate those deviations. That’s the standard the Supreme Court has handed down that the Board has to apply. The governing body and the planning board have already determined that this is a suitable and appropriate site.

Mr. Kabis said from a visual aspect a tree would be better.

The Board took a two minute break.

Vice Chairman Smith, Mr. Wu, Mr. Patel and Mr. Sudol certified they read the transcripts from the July 30, 2019 meeting.

A motion to approve the application subject to conditions was made by Mr. Patel and seconded by Mr. Kabis. The motion carried on the following roll call vote:

Ayes: DeRochi, Fedun, Kabis, Smith, Wu, Lopez-Lopez and Patel
Nays: None

There being no further business to come before the Board, the meeting was adjourned at 10:51 p.m.