

**MINUTES OF THE
MENDHAM BOROUGH BOARD OF ADJUSTMENT
April 5, 2011
Garabrant Center, 4 Wilson St., Mendham, NJ**

CALL TO ORDER

The regular meeting of the Board of Adjustment was called to order by Chair Seavey at 7:30 p.m. at the Garabrant Center, 4 Wilson Street, Mendham, NJ.

CHAIR'S ADEQUATE NOTICE STATEMENT

Notice of this meeting was published in the Observer Tribune and Daily Record on January 13, 2011 in accordance with the Open Public Meetings Act and was posted on the bulletin board of the Phoenix House.

ROLL CALL

Mr. Palestina – Absent	Mr. Seavey - Present
Mr. Peck – Present	Mr. Smith - Present
Mr. Peralta- Present (Zenjon)	Mr. McCarthy, Alt. I - Present
Mr. Ritger - Present	
Mr. Schumacher - Present	

Also Present: Mr. Hansen, Board Engineer
Mr. Germinario, Board Attorney
Dr. Eisenstein, Telecommunications Consultant

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PUBLIC COMMENT

Chair Seavey opened the meeting to public comment or questions on items that were not on the agenda. There being none, the public comment session was closed.

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APPROVAL OF MINUTES

On motion by Mr. Seavey, second by Mr. Smith and all members being in favor, the minutes of the March 1, 2011 regular meeting of the Board were approved as written.

HEARING OF CASES

Micera, John & Monica – Hardship Variance
Block 2401, Lot 20, 20 Spring Hill Road

Mr. Germinario, Esq. presented the following resolution to the Board:

**BOROUGH OF MENDHAM BOARD OF ADJUSTMENT
RESOLUTION OF MEMORIALIZATION**

**Decided: March 1, 2011
Memorialized: April 5, 2011**

**IN THE MATTER OF JOHN AND MONICA MICERA
“C” VARIANCE APPLICATION
BLOCK 2401, LOT 20**

WHEREAS, John and Monica Micera (hereinafter the "Applicant") applied to the Borough of Mendham Board of Adjustment (hereinafter the "Board") for the grant of a variance pursuant to N.J.S.A. 40:55D-70c (hereinafter the “Variance”) by application dated 1/17/11; and

WHEREAS, the application was deemed complete by the Board, and a public hearing was held on 3/1/11; and

WHEREAS, the Board has determined that the Applicant has complied with all land use procedural requirements of Chapter 124 of the Ordinance of the Borough of Mendham, and has complied with the procedural requirements of the Municipal Land Use Law, N.J.S.A. 40:55D-1, et seq., including without limitation, public notice pursuant to N.J.S.A. 40:55D-12; and

WHEREAS, the Board makes the following findings and conclusions, based on the documents, testimony and other evidence comprising the hearing record:

1. The property which is the subject of the application consists of 218,333 sq. ft. located in the 5-acre residential zone on 20 Spring Hill Road. The property is developed with a single-family dwelling and accessory structures. Two 4-foot piers are installed on either side of the driveway entrance.

2. The improvements to the subject property for which the Variance relief is sought comprises the installation of 30-inch light fixtures on top of the existing 4-foot driveway piers, thereby exceeding the 4-foot maximum fence height established by Ordinance §215-29B(2).

3. The Applicant has submitted the following documents that depict and/or describe the improvements for which the Variance relief is required:

- Site/Grading Plan prepared by Jeffrey Careaga, PE, Budd Lake, NJ, dated December 3, 2009, consisting of one sheet
- Sketch of the driveway piers, two sheets, undated
- 4 color photographs of the driveway piers

4. In support of the application, the Applicant has submitted the following documents, which are part of the hearing record:

- Board of Adjustment application form and attachments, dated January 17, 2011
- Application Checklist (undated)
- Site Inspection Authorization, dated January 12, 2011
- Certification of Status of Municipal Tax and Sewer Fees, dated January 13, 2011
- Correspondence from the Borough Zoning Officer, dated January 17, 2011
- List of owners within 200 feet dated January 13, 2011 provided by Tax Assessor's office

5. The Board's planning and engineering professionals and/or consultants have submitted the following reports concerning their reviews of the application, which are part of the hearing record:

Paul Ferriero, PE, CME, dated 2/7/11

6. In the course of the public hearing, the Applicant was represented by John Micera, and the Applicant presented his own testimony, which testimony is part of the hearing record.

7. The documentary evidence and the testimony of the Applicant and/or Applicant's witnesses adduced the following facts:

Lights on the stone driveway piers are needed to sufficiently illuminate the driveway entrance for security, safety, and practical daily use. This property configuration is unique, in that, based on the size of property (5 acres) it has disproportionate road frontage of nearly 1400 linear feet. There is only one driveway access to the property and the driveway entrance is in an area that does not benefit from street lights and did not have a well defined driveway entrance without the piers. Spring Hill Road is a narrow lane and the driveway entrance is sloped where it intersects road.

In case of emergency, the lights will clearly define the entrance and be a visual benefit for daily access to the driveway. The house is located a significant distance from the road and a house number located on the house would not be visible from Spring Hill Road. The house number is indicated on the driveway pier at the driveway entrance. For convenience and safety reasons the house number will be illuminated for ease of identifying the property. The height of the existing piers meet the maximum height required and are appropriately sized for the size of the property and scale of the house. The lights needed to be located at a height that permits sufficient illumination. Installation of a low voltage light fixture is in proportion to the size of the pier and allows for illumination for a distance sufficient for safety, yet not to an intensity that the light will negatively effect the surrounding area.

The driveway piers and lights combination are consistent with neighboring properties (several properties located on Cherry Lane have very similar driveway piers). The overall height of the piers are in keeping with driveway piers on neighboring properties and the piers at the entrance to Spring Hill Road. The piers defining the entrance to Spring Hill Road from Cherry Lane are higher (over 7' high) than the piers and lights combination for this application.

Driveway piers with lights set atop are used frequently in the Borough on many properties and the majority of the existing piers are higher than 4 feet. This is consistent with the

need for a practical height to set the lights. If the stone piers were to be reduced in height so that the combination of the lights and piers will be 4' high, the piers would be of a scale inappropriate and aesthetically awkward. And in that situation, the lights will be much lower and the function will be significantly compromised.

8. Based on the hearing record, the Board has made the following findings and conclusions relative to the Variance relief sought by the Applicant:

The deviation from the zoning standard for front yard fence height pursuant to Ordinance §215-29B(2) provides a safety and aesthetic improvement to the subject property by making the entrance driveway and house number more visible.

By reason of the size and configuration of the subject property, the strict application of Ordinance §215-29B(2) would result in peculiar and exceptional difficulties to, and impose exceptional and undue hardship upon the Applicant. Therefore, the grant of the Variance is warranted pursuant to N.J.S.A. 40:55D-70c(1) so as to relieve such difficulties and hardship.

The following purposes of the Municipal Land Use Law and the Borough of Mendham Land Use Ordinance would be advanced by granting the Variance so as to allow the requested deviation from Ordinance §215-29B(2):

- promotion of public safety (NJSA 40:55D-2a)
- promotion of a desirable visual environment (NJSA 40:55D-2i)

The detriments associated with the deviation are considered minimal because the overall height of the driveway piers and light fixtures is consistent with similar driveway entrance piers in the neighborhood and throughout the Borough.

Therefore, the grant of the Variance is warranted pursuant to N.J.S.A. 40:55D-70c(2), because the benefits of the deviation will substantially outweigh the detriments.

The Board further finds that this relief can be granted without substantial detriment to the public good and that the granting of this relief will not substantially impair the intent and purpose of the zone plan and/or the zoning ordinance.

NOW, THEREFORE, BE IT RESOLVED, that the Board does hereby approve the application and grant the Variance requested by the Applicant, as described hereinabove, pursuant to N.J.S.A. 40:55D-70c(1) and 50:55D-70c(2).

This approval is subject to the following conditions, which shall, unless otherwise stated, be satisfied prior to the issuance of a zoning permit for the improvements requiring Variance relief.

1. The Applicant shall provide a plan for recording purposes. Such plan shall contain the location of the piers in plan view, the lighting details, approval signature block, identification of ordinance section relief, and key map.

2. All application, escrow and inspection fees shall be paid in full and current at the time of issuance of zoning permits and construction permits.

3. This approval is subject to all other approvals required by any governmental agency having jurisdiction over the subject property.

4. This approval is subject to the payment in full of all taxes and assessments due and owing to the Borough of Mendham and/or any agency thereof.

5. Pursuant to Ordinance Section 124-22, the Variance relief granted herein shall expire within one year of the memorialization of this Resolution unless the construction or alteration of the improvements requiring Variance relief has actually been commenced during that time period, provided that the running of the one-year time period shall be tolled during the pending of any appeal of the Board's decision to the Borough Council or to a court of competent jurisdiction.

ROLL CALL: The result of the roll call of eligible voters was 5 to 0 as follows:

In Favor: Peck, Ritger, Schumacher, Smith, Seavey
 Opposed: None
 Abstentions: None

The resolution was approved.

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New Cingular Wireless PCS, LLC (AT&T) - Conditional Use Variance/Site Plan
 Block 2301, Lot 13, 350 Bernardsville Road

Present: Michael Lavigne, Esq., Pitney Day, LLC – Attorney for the Applicant
 Glenn Pierson, Piercon Solutions - RF Engineer for Applicant
 Robert Simon, Esq., Herold Law – Representing Interested Parties

Exhibits: L-1: Series of Propagations:

- A: Washington Corner Propagation from Bernardsville Hearing
- B: Pierson Exhibit E from AT&T application
- C: 3rd Page of Exhibit 0-2
- D: Pierson Exhibit G from AT&T application
- E: Page from 0-2
- F: Zoom label – Bernardsville Verizon Exhibit

L-2: A-D: Specification Sheets

The hearing continued with Mr. Simon, Esq. addressing a series of questions to Mr. Pierson on his conversation with Mr. Kreisberg and Exhibit O-1. Mr. Pierson stated that he did not speak with Mr. Kreisberg directly about the plots. He did not know at what frequency the propagation was made. He was told that the design threshold was minus 85, and that is indicated on the color plot. Mr. Simon, Esq. noted that there was a plot at minus 75 as well.

Mr. Pierson continued to respond that he had had questions on 0-1 and 0-2, but was not provided with any information to validate Mr. Kreisberg's work, and exploring it further was not necessary to conduct his own independent analysis. Mr. Pierson would not draw any conclusion from 0-1. He would not make any guesses or conclusions on what he could not validate.

In terms of his own plots, Mr. Pierson stated that the information he used to validate his propagation was on the exhibit. He does his own engineering analysis. Generally they do a scan test and the data is presented on the exhibit. They used their own calibrated equipment, their own test van, and gathered signal strengths from the existing site in order to determine what the existing signal was. In terms of whether he changed the models on Mr. Kreisberg's propagation tool, Mr. Pierson stated that they tune the propagation in order to match reality. He did not remember specifically what models he changed. In terms of the terrain data, he used that which is in the ATOLL model.

Mr. Pierson continued that he also looked at the terrain maps. As indicated in his letter of February 15 to Dr. Eisenstein, the bin size is 30 meter. Normally the clutter that would be associated with it would also be 30 meter and coincide with the bin size in propagation. Addressing the calibration of the path loss model, Mr. Pierson reiterated that they have the drive tests, and that they know what the power output is. They tune the models to match the empirical data.

Responding to Mr. Simon, Esq. on how he knew that Mr. Kriesberg's propagation plots were not accurate, Mr. Pierson reiterated that he could not validate the information so he started from scratch and looked at the empirical data. He did ask Mr. Kriesberg for the information, but he was not able to produce anything that was sufficient to validate the propagation. Mr. Kriesberg did supply a couple of sample pieces of data that were mostly outside of the area, but they did not have enough detail to make any conclusions.

Addressing Mr. Simon, Esq. on his additional questions dealing with empirical data, Mr. Pierson stated that the empirical data tells what exists. A person trained in the use of a propagation tool works with the tool and what could be hundreds of parameters in order to get the model to match reality based on the empirical data. The empirical data that they used is from the drive tests, topographical maps, power outputs of the base station, sensitivity of the mobile and some experience.

Mr. Simon, Esq. stated that Mr. Palestina had requested a propagation map for AT&T for Washington Corner Road and questioned whether it had been provided. Mr. Pierson stated that they do not have it. It is his understanding that the applicant does not have an application in with Verizon. There is only a Letter of Intent. It is still open, and they are not inclined to do propagation for Washington Corner Road.

Clarifying Mr. Simon's reference to his conversation with Dr. Eisenstein, and the need not to present "other data", Mr. Pierson explained that it was his understanding that Dr. Eisenstein asked for other signal strengths of -95 and -75 for his own edification, but that would not be presented. They would use the design criteria of -85.

In terms of whether the colors representing -75, -85 and -95 represent a range or just the precise power threshold that is referenced, Mr. Pierson again reiterated that he would not make guesses on what someone else had provided. He had a lot of questions on the data, put it aside and did his own independent analysis. Mr. Simon, Esq. proceeded with a series of questions to which Mr. Pierson responded that he did not have validation for Mr. Kriesberg's work. The basic reason for the conversation with Mr. Kriesberg was to obtain the validation.

Mr. Simon, Esq. questioned what was depicted as W1075 plan site on O-1. Dr. Eisenstein and Mr. Pierson clarified it as being W1076. Mr. Pierson advised that when the tool is used, it is in the database. In this case it is a search ring. There was not any information that had a specific address, anything that would constitute it as a candidate, or anything that had a lease. It is an area where they know they have a need and a search area is defined to start a project for the need. He did not research how wide the area was. Mr. Simon, Esq. stated that it is described on O-1 as a planned site. There is also a purple dot near Baxter Farm Road that is identified as a proposed site.

Responding to Mr. Simon, Esq. on whether he could identify the proposed site, Mr. Pierson stated that he could not as he did not research the site in that area as it had no effect on the particular coverage for the application gap. He bases his conclusion on the fact that he knows the topography between the intersection of Glen Alpin Road and the church and Route 202. He is working on a Mendham application. There will not be a coverage overlap or interaction between the sites as there is terrain in between. Mr. Simon, Esq. confirmed with Mr. Pierson that he was not familiar with a T-Mobile application at the Seventh Day Adventist Church at the intersection of 202 and TempeWick.

Describing the scope of his analysis as not going that far east, Mr. Pierson stated that there are two basic sites that developed a gap to the north. They are Conifer Drive and St. John's. There is also a very large gap going south into Bernardsville. The next sites that would even possibly overlap, but do not to this application, are the ones in Downtown Bernardsville and the monopole by North Maple Avenue. Mr. Pierson did not know why Mr. Kreisberg depicted two sites to the southwest in the area of Peapack and Gladstone. His analysis only depicted the ones that actually have an effect and are possibly hand-off sites to the application. They establish the gap.

In terms of identifying from which sites the green and yellow depictions emanate on O-1, Mr. Pierson stated that he could not draw any conclusions from the exhibit as there is nothing to back it up. He did not ask Mr. Kriesberg about it. Mr. Pierson stated he did not have an opinion on whether O-1, propagation Map A was a lower frequency like 850, or a higher frequency like 1900 megahertz. He would not make guesses on it. He would not validate Mr. Simon's proffer that hypothetically if the map depicted 850 megahertz coverage, it shows reliable and relatively seamless coverage in the entire Borough at - 85 dBm other than the pink pocket to the northeast south of 24. Mr. Pierson supported his propagation and drive tests that show what reality is.

Mr. Simon, Esq. advised Mr. Pierson that as an expert witness, under NJ Land Use Law, he is allowed to hypothesize as an expert. He is asking the question as a hypothetical, and it is not being answered.

Mr. Lavigne, Esq. advised that they are trying to be as patient as possible with the process, but they have a limited amount of time. They have spent the first half hour of their time trying to speculate with regard to exhibits that the witness did not prepare, did not testify to, and that were not asked for by the Board's independent RF consultant. Chair agreed with Mr. Lavigne, Esq. and requested that Mr. Simon, Esq. make his questions more direct.

Mr. Simon, Esq. responded that he needs to make a record, and that the propagation was submitted as part of the application. There was testimony that Mr. Pierson spoke to Mr. Kreisberg, was aware of it, and asked him questions about it. It basically shows that at -85, as a proffer, that basically the entire Borough is covered. He thought it only fair that Mr. Pierson answer the questions.

Chair Seavey stated that he thought that Mr. Pierson had basically told Mr. Simon, Esq. that he was not going to answer the question. He did not think he was refusing, but that he heard him say that there is not anything that he can validate. He is not going to base it on someone else's work. The differences in their opinions are on the record. Unless he is missing something legally, it has been established that Mr. Pierson has given testimony that is different than Mr. Simon's analysis of the Kriesberg report. Mr. Simon, Esq. has made his point.

Moving to Mr. Pierson's report, Mr. Simon, Esq. questioned why his report only shows 1900 megahertz propagation and drive test of existing sites and not any 700 or 850 megahertz drive tests. Mr. Pierson responded that 1900 megahertz is the limiting case as it is the more-restrictive license and propagation that AT&T has. They actively use it in this area today. Their design needs to take into account the worst-case situation. No drive tests were made of the proposed site or any alternate sites.

Responding to Mr. Simon, Esq. on whether the design threshold at 1900 megahertz in his report provides a reliable in-building coverage, Mr. Pierson stated that it is a design threshold that is for

in-vehicle. There are some buildings that will have reliable coverage, but those will be the lighter smaller wood-frame structures. It would not have reliable in-building coverage for the area of Mendham as several of the houses are much larger and made of masonry. He knows that by visual inspection.

Clarifying whether the clutter type including a convention center, stadium, school buildings and airport used in his report were appropriate for the area, Mr. Pierson stated that they may not be located in the area, but the tool contains those clutter types. If none of them show up in the demographic table, the clutter table, then they do not apply.

Responding to another series of questions, Mr. Pierson stated that he does not have a traffic analysis on how frequently the roadways are travelled, and he has not looked at the number of homes in the gap. He is not aware of whether any user of AT&T service has complained of any inability to reliably make, receive, or maintain a call. In terms of his February 15, 2011 study, he confirmed that there might be some variation based on the day of the test. He was not aware of any reason that AT&T would lose their license if they did not get the application approved. He was not aware of any AT&T filings with the FCC at this time.

Addressing Mr. Simon's questions dealing with the operation of the cell phones, Mr. Pierson stated that the GSM standard receives sensitivity at -102 dBm. It is the standard at which the digital voice can be decoded. At -103 dBm it depends on the manufacturer's radio. It has to meet a minimum standard. Some may exceed it, some may not. He is not aware of any FCC document that states -85 is a required standard. In his experience -88 or -90 dBm coverage is not reliable based on the link budget which is part of the GSM global standards. There are a series of elements that go into a link budget that affect the fading.

In terms of the Kings application Mr. Pierson responded that AT&T has not discussed with him whether a search ring will be issued for that proposed tower. Omnipoint and T-Mobile are the lead applicants. AT&T has proposed to purchase T-Mobile. Should the King's application or a site nearby be approved, and AT&T did not co-locate, he did not know how much of the Borough would be covered for AT&T at 1900 megahertz for -95 dBm as he did not do the calculation. As Kings is in a valley and there are hills at the high school and at Hilltop Church, signals from Kings would be prevented from covering much of the area that the proposed Sisters of Christian Charity site would cover. He has not created the propagation. Should the T-Mobile application be denied, he believed that both T-Mobile and Verizon established that there was a gap in service. The gap would still remain.

Moving to the Washington Corner Road site and Mr. Simon's question on whether that site would cover parts of Cherry Lane, Bernardsville Road and Hardscrabble Road in Mendham Borough, Mr. Pierson stated that based on evidence in Bernardsville by Verizon, the coverage would probably reach Hardscrabble and to Mendham Borough. He did not recall Cherry Lane. He gets to the Conti property. Mr. Pierson clarified that he was referring to the evidence provided in Bernardsville by Verizon. Responding to Mr. Simon, Esq. on whether the Sisters of Christian Charity site would be needed at 800 megahertz if the Washington Corner Site is approved and there is co-location by AT&T, Mr. Pierson stated that he did not present 800. It is not the design criteria as they are using 1900. Going by memory he thought that there would still be gaps in some of the valleys.

Reversing the scenario, Mr. Simon, Esq. questioned whether the Washington Corners site would be needed by AT&T to carry parts of Cherry Lane, Bernardsville Road and Hardscrabble Road in Mendham Borough at 1900 megahertz if the Sisters site were approved. Mr. Pierson referred to the Exhibit D and noted that the north side to the hills would be covered. Most of Cherry Lane and Mendham Road north of the border would be covered by the proposed site. The Sisters site does not touch Hardscrabble.

Offering another scenario, Mr. Simon, Esq. proposed that King's and Washington Corner Road are up and active and AT&T co-locates at both those locations. He questioned what additional 850 megahertz coverage the Sisters site would provide in the Borough of Mendham. Mr. Pierson stated that his testimony is 1900, not 850. He believed that there were still going to be gaps without the Sisters around Pleasant Valley and along Hilltop at a minimum. Responding to what additional coverage would be provided at 1900 megahertz, Mr. Pierson explained that King's does not do much to the southwest after the high school due to the hill. There is another hill at the church and there is not much coverage to the south east. The hills coming north to south peak out on Mendham Road at the boundary. Anything to the south is not going to cover anything to the north. Pleasant Valley is to the north. Kings and Bernardsville will not cover Cherry Lane.

Addressing Mr. Simon, Esq. on his questions concerning overlap, Mr. Pierson explained that 50% overlap can be eliminated as there are not the capacity issues which are found in a more urban

area. There will be overlap in St. John's, but if the application is approved, they can go back and move the antennas so that it would be able to cover better to the west, north and east. The Sisters would focus on the southern area of Mendham. That would provide optimization. Exhibits A, B, C and D show the overlap. There is a certain amount of overlap that is required for a successful handoff without dropping a call. The amount depends on topography, how fast the traffic is moving, and how fast the signals are dying off in the area. The antennas cannot just be moved around any time to cover a particular spot. The idea is to maximize the signal and to reduce the dropped calls and provide as much coverage to as many people as possible. When another site is added to the system, it is again optimized to cover as many people as possible and provide the best service.

Responding to Mr. Simon, Esq. on how an on-street signal strength is affected by a residential building, Mr. Pierson stated that it is weakened by 10 to 20 dBs. That is based on in-building tests, documents and studies. A car weakens an on-street signal by 6 to 10 dBs. Addressing Mr. Simon's reference to femtocells or cell boosters, Mr. Pierson explained that they do not increase gain. They are a mini personal base station that one can purchase and pay monthly fee to install it in their home and hook it up to their broadband connection. In that way it can talk back to the service provider's switch. It provides in-building coverage similar to a person who want Wi-Fi coverage in their home for laptop computers. It covers about the same area and has about the same power output.

Mr. Pierson continued that they do not provide any gain or increase. The Femtocell would emanate a signal in one's home like a Wi-Fi router for the computer. It would create its own little signal. Advertisements say that it would provide coverage within that 50 or 100 ft., but they have used some, and they do not find them a simple, reliable, "never-have-to-touch-it-again" type of box. He referenced overheating issues, deteriorating signals on conference calls and maintenance when carriers update a signal.

Addressing Mr. Simon's question on whether AT&T considered re-tuning their existing towers to get their desired dB level, Mr. Pierson clarified that re-tuning is not adjusting down tilt or orientation. But in terms of optimizing the system as best as possible that has been done. The engineers look at the sites on a regular basis and provide updates or optimization to the antennas.

Continuing to address questions on the differences in antennas on St. John's vs. Conifer, Mr. Pierson explained that St. Johns has 53.1 dB affected radiating powers and Conifer 55. The antennas are different as the gain is different. In the case of St. Johns there are hills that go up very abruptly, especially to the west. That site has antennas with a little lower gain but a larger vertical pattern. It would have a little less out on the horizon but better underneath itself in order to provide coverage coming down the hill. Each antenna has a little bit different characteristics with the angle, width and vertical. That makes a dB or so difference in the maximum gain, but it does not necessarily mean it is a bad choice. Raising a tower height could only have an effect at St. John's or Conifer, but it would not do a lot given the terrain. It would not solve the gap as the terrain dips from Hilltop Church coming down on Hilltop Road and over into Pleasant Valley. There are also dips between the Conti property and the Sisters. Moving the antenna up 20 ft. would not overcome a 50 to 100 ft. drop in elevation. Going up higher is not going to make a difference as the angle coming down the hill does not change.

Responding to Mr. Simon, Esq. Mr. Pierson stated that he has not conducted any site acquisition. It is his understanding that when the search area was issued it was issued basically on the existing structure, the Sisters of Christian Charity. There were no other existing structures that were found, so there are no alternate candidates for the project.

Addressing the study he had completed several years ago for Sprint on DAS in the area of Claremont Road, Mr. Pierson explained that it entailed looking at DAS from a pure coverage standpoint. It required an extreme amount of Dascos, the equipment that is put on a telephone pole with an antenna. It would not cover very far due to the tree cover, and it would not cover many houses because the houses were set so far back from the road the Dasco did not have enough power to get to or from the road and the house.

Chair opened the meeting to additional members of the public wishing to question Mr. Pierson.

Mr. Gorman, 415 Bernardsville Road, stated that he is one of the closest residents to the proposed site. He had reviewed Mr. Pierson's report and noted that there were three types of transmitter sites: a 40 watt, a 20 watt and a 16 watt. He questioned Mr. Pierson on whether the towers were composed of the three different types. Mr. Pierson advised that there are three different frequency bands and the technologies of each one has a somewhat different power depending on what it is trying to accomplish. His presentation mainly deals with the 16 watts.

Mr. Gorman continued referring to a 20 watt light bulb similar to what one might have in the kitchen lighting or interior of the house. After clarification to Mr. Gorman's question, Mr. Pierson stated that visible light is much higher in frequency than radio waves. To his follow-on as to whether the bulb would lose strength 1000 ft. from the tower, Mr. Pierson agreed in theory, but stated he has never done any studies in light propagation so he could not agree or disagree from an engineering standpoint. Responding to Mr. Gorman's question on the signal strength he would receive with his home 1600 ft. away with clear visibility of the cupola, Mr. Pierson stated that he would probably receive a signal stronger than -75 as long as there were no trees in the way.

Mr. Gorman presented a scenario of decreasing dbms of -45 as they left the tower reaching his home at -75 dbm. and questioned Mr. Pierson on the reasonability of the math. Mr. Pierson agreed providing that Mr. Gorman was receiving -75 dBm. Mr. Gorman continued making his point with math on the decreasing signal and questioned Mr. Pierson on whether the signal that would be received in his phone is infinitesimal. Mr. Pierson agreed stating that the receiver is a calibrated, sensitive receiver designed to receive the low signals as radio waves, decrease in strength very quickly as they travel. The phone transmits at 22, 23 dBm maximum if it was even transmitted at maximum power. Mr. Gorman continued stating that the difference between the 25 dBm from the phone and the -75dBm from the tower is 100 dBm. Mr. Pierson agreed with the math. Mr. Gorman concluded that the cell phone was producing a signal at a significantly higher strength in his ear than the signal from the tower.

Mr. Gorman ended by stating that he has poor reception from AT&T in his home and questioned whether he would have a better chance of getting a signal in case of burglary if the Sisters' transmitter is operating. Mr. Pierson answered "absolutely".

Continuing with the public questioning, Mr. Lupo, 17 Dean Road, asked Mr. Pierson how he would determine a propagation map's accuracy. Mr. Pierson advised that to determine the propagation, he tunes the model using empirical data. He does not necessarily use a propagation from something else. The one time that a propagation from a nearby site would be used and parameters transferred to an adjacent site is when there is no empirical data for the site being modeled. He has not done any comparison of his AT&T maps to the Verizon and T-Mobile maps.

Mr. Lupo continued by clarified with Mr. Pierson the various frequencies that various carriers were using. Mr. Lupo requested to enter an exhibit associated with information from cell tower hearings in Bernardsville that depicted continuous coverage from Conifer to Daytop for the area near Kings. Mr. Lupo believed that in this case Mr. Pierson's model closely aligned with Mr. Kreisberg's model. After further questioning of Mr. Lupo and clarification that the exhibit contained maps prepared by Mr. Pierson for a different carrier in a different town running at the same frequencies, Mr. Germinario, Esq. allowed Mr. Lupo to enter Exhibit L-1 as Mr. Pierson had prepared it and could authenticate it. Mr. Lavigne, Esq. questioned its relevance and entered an objection.

Mr. Pierson reviewed Exhibit L-1 and identified the pages that were his work. Beginning his questioning, Mr. Lupo stated that in his comparison of the Bernardsville propagation showing Verizon on Conifer and Daytop and the AT&T model in the Cold Hill and Tempe Wick area, he noticed very similar patterns. (L1-A and L1-B) He questioned why the same area seemed to be non-covered or lower at - 95. Mr. Pierson answered that it just demonstrates where the signal is falling below the threshold. It could be related to distance or terrain. Mr. Lupo then compared L1-A to L1-C to Mr. Kreisberg's maps and noted a very similar weak area in the vicinity of Cold Hill Road connecting to Tempe Wick. Mr. Lupo questioned whether at 1900 the chart depicted that the Sisters of Christian Charity steeple would cover the area (L1-D). Mr. Pierson responded that it will provide - 95 dBm signal strength. It is not reliable service to the area of Tempe Wick and Cold Hill. After some further questions by Mr. Lupo on the various frequency propagations, Mr. Pierson stated that Mr. Lupo was mixing various factors. He explained the technical differences and that the similarities are coincidental.

Responding to Mr. Peck on the impact of the topography, Mr. Pierson stated that it is definitely a reflection on topography. There is a lower area south of 24 on Tempe Wick. It is across the street from Kings. The fact that numbers are added and subtracted to wind up with something that is equal is coincidence. It does not mean that L1-B reflects that there is reliable coverage in the area.

Addressing L1-D, Mr. Pierson stated that there is a lower signal strength that is not considered reliable, and that does not take into account the variations in the radio signal standards. In reference to L1-E and the possibility of changing the angle from St. Johns to sisters of Christian Charity to cover the area, Mr. Pierson stated that with his own Exhibits E and G he indicates that

the Sisters of Christian Charity could provide low-level signals, below reliability thresholds in that particular area. L1-E does not have any basis as it has not been validated.

After discussion, Mr. Lupo entered Exhibit L-2 (A-F), cut sheets. He would also be referring to the first page of O-2 previously entered. Responding to Mr. Lupo on the antenna azimuths depicted on O-2, Mr. Pierson stated that the azimuths have been changed and reflect a nice standard of 120 degrees apart. They have been designed for the hills in the area. Mr. Lupo and Mr. Pierson exchanged a series of questions associated with the technical aspects of the varying antennas for the various frequencies and their associated wattage.

Mr. Lupo returned to the comparison of Mr. Pierson's versus Mr. Kreisberg's model questioning Mr. Pierson on why his model would be different if the parameters are the same and the difference is he used 1900 mgh vs. Mr. Kreisberg's 850 mgh. Mr. Pierson responded that there are about 100 settings that one can specify in a propagation map. He could not validate which of those used by Mr. Kreisberg were different from his. Messrs. Lupo and Pierson again exchanged dialog on the coincidence.

Responding to Mr. Lupo on whether his phone would pick up 850 megahertz frequency, Mr. Pierson stated that it depends on what frequencies and technologies that AT&T deploys and what is available in the area. There may not be a choice between 1900 and 850 as they may have 4G or GSM deployed. In terms of whether the phone would switch from 1900 to 850 if the 850 were the stronger signal, Mr. Pierson stated not necessarily. If one has a GSM phone the user is not capable of using the 4G network, GSM would need to be at 1900 or 800.

Mr. Harry Riskin, Cromwell Lane, continued with public questions of the witness. Mr. Riskin confirmed with Mr. Pierson that the drive test had been done based on only one day. Mr. Pierson elaborated stating that it had been conducted on February 7, a cloudy day of about 40 degrees. The test was completed by his employee and he was not present. Responding to Mr. Riskin on why, when he is travelling Cherry Lane at a minimum of two times a day, he has never lost coverage, Mr. Pierson stated that it does occur. The coverage does not drop off and become non-existent if it goes below a design threshold. There are instances when one will be able to make a call and some where one will not. It is considered unreliable. Mr. Riskin confirmed for Mr. Lavigne, Esq. that he had an AT&T phone until November when he switched to Verizon and he has still not lost coverage.

There being no additional questions of Mr. Pierson, Chair Seavey closed the public session.

Chair discussed scheduling issues for the continuation of questions by Dr. Eisenstein of Mr. Pierson. After discussion and given professional availability, Chair Seavey proposed that the applicant continue with a new witness at the May 3 meeting when Dr. Eisenstein is not available. As the Board attorney will not be available in June, he will hold June scheduling for further input. In July, the hearing will continue with Dr. Eisenstein's questioning of Mr. Pierson. He noted that if needed, Dr. Eisenstein would also be available in June. Mr. Lavigne, Esq. proposed moving forward with the emissions testimony of interest to the public in May. Dr. Eisenstein would be provided the transcript and would do his questioning in June/July.

Board requested that Mr. Pierson propagate with his settings and tuning devices the criteria that Mr. Kreisberg has provided. Mr. Smith stated that it is important for the Board to know if Mr. Kreisberg propagated at 850 or 1900 mgh. Addressing Mr. Peck on whether there is someone who could provide testimony to backup Mr. Kreisberg's report, Mr. Lavigne, Esq. advised that Mr. Kreisberg is no longer a part of the project. Mr. Pierson stated that there were issues with accuracy.

A discussion followed on specifically what the Board was asking for as opposed to what the applicant had already provided and Dr. Eisenstein had requested. The Board was interested in seeing the propagation at 850 mgh. Dr. Eisenstein advised the Board that he originally requested the 1900 mgh as it is a more restrictive propagation, and 1900 is in accordance with their license. It was his opinion that the Kreisberg report was propagated at 850 and when the Board saw a propagation from Mr. Pierson at 850, they would align. Chair Seavey reiterated that the Board wanted to see the 850 propagation from Mr. Pierson. After some further discussion, Dr. Eisenstein advised that all Mr. Pierson had to do is the same propagation that he did 1900 at 850.

Mr. Simon, Esq. advised the Chair that under the MLUL, the Board could subpoena Mr. Kreisberg who presented evidence as part of the application. He also requested that Mr. Pierson propagate at 850 megahertz at -85, -90 and -95 based on some of the cross-examination questions that were asked of him.

Mr. Seavey concluded by requesting a map based on Mr. Pierson's qualifications and certification that propagates with a similar legend as the bottom of the Kreisberg map which would be at 850 at -75 in green, - 85 in yellow and - 95 in purple. Responding to Mr. Lavigne, Esq., Mr. Seavey stated that the public session could be opened again as related to the requested plots. As Dr. Eisenstein would not be at the May meeting, Mr. Pierson stated that the propagations would be available a minimum of 10 days before the June hearing.

Mr. Lavigne advised that the application would be carried to the May meeting with no additional notice.

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Board took a 5-minute break.

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Mr. Peralta, who is recused from the AT&T application, joined the Board for the Zenjon application.

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Zenjon Enterprises, LLC – Preliminary and Final Site Plan/Variances/Interpretation
Block 1501, Lot 11, 25 East Main St. (Historic District)

Present: Robert Simon, Esq., Attorney for Applicant
David Fantina, Engineer for the Applicant

Mr. Germinario, Esq. reviewed the public notices and advised that the Board has jurisdiction to proceed.

Mr. Germinario, Esq. explained the Interpretation issue and advised the Board that he agrees with Mr. Simon, Esq. that a C variance, not a D variance, is required for relief from development standards and for three uses in each building. The standards set up parameters. The applicant is before the Board of Adjustment as the application is for more than one principal building on the site. A D variance is required to permit a second principal building. Responding to Mr. Simon, Esq. on the fact that he did not find anything in his review that required a D variance for the second building, That is why they applied to the Planning Board originally. Mr. Germinario advised that it was reviewed with the Planning Board attorney and a jurisdictional call had been made by Mr. Henry, Esq. He further clarified by indicating that Mr. Henry, Esq. had reviewed the accessory use portion of the ordinance and determined that only one principal use is permitted.

As the jurisdictional call had been made, Mr. Simon, Esq. stated that they were ready to proceed and would provide proofs for the D variance.

Mr. David Fantina, Engineer for the applicant, presented his credentials and was accepted as a witness.

Mr. Fantina provided an overview identifying the property as 25 East Main St. with a 2,000 sq. ft. abandoned building. He testified that the proposal is to renovate/reconstruct the building to an office building of 4,200 sq. ft. The project would be conducted in two phases. In Phase I they would work on the existing building and there would be minimal site improvements. In Phase II, a second office building of 5,820 sq. ft would be constructed, and the other site improvements would be made.

Utilizing Sheet 10 of the plans, the phasing plans, submitted to the Board, Mr. Fantina stated that in Phase I the existing building would be reconstructed and enlarged. The westerly driveway would be closed off and the eastern driveway would remain in its present configuration. It is wide enough for two-way traffic. There will be minor revisions to the parking area in the rear with some re-curbings, restriping and upgrading to the pavement where necessary. A drainage inlet to the existing drainage system will be provided. There would be a decrease in impervious coverage and no stormwater management control would be required. The new building will be landscaped, but the existing lights would be reused. There will be 15 parking spaces.

Continuing with Sheet 3 of 10 of the plans, Mr. Fantina stated that in Phase II a second 5,820 sq. ft. office building would be constructed. The remaining site improvements would be made. The existing parking would be completely removed and redone. A dumpster enclosure would be

located toward the rear. There would be stormwater management and a large underground retention basin. The changes received from the Board Engineer and the County will be made to the system. There will be less runoff from the site after the development than there is today. A full lighting and landscaping plan will be developed. There is also a Soil and Sediment Control Plan.

Addressing Mr. Hansen's report on the variances and design waivers they would be requesting, Mr. Fantina stated that they would need two variances. One would be for two separate entities business entities on a lot or in a non-historic building. They are proposing up to 3 separate entities in the front and up to 3 separate entities in the rear for a total of 6. They would also need a front yard setback for the reconstruction of the existing front building. They are not increasing the non-conformance. Mr. Hansen advised that since they are taking down the building with only the foundation remaining, a variance would be required.

Continuing, Mr. Fantina stated that they would also require a series of design waivers. In Phase I they require 17 parking spaces, but are proposing 15. The front building will be occupied by the applicant, Krasney Financial, and he has advised that the parking needs will be sufficient for his business. Mr. Hansen added that if the design waiver was granted, they would need to agree to a restriction for the type of business that could go in there in the future as the parking needs could vary.

Mr. Fantina explained that in addition, the driveway isle width required is 24 ft. They are requesting 22 ft. Mr. Simon, Esq. added that a traffic engineer would testify. Responding to Mr. Smith on the fact that the width was 21 ft. at the street and 22 ft. in the rear, Mr. Fantina advised that it would remain that way. It will not be re-curbed. They are also requesting a waiver from parking stall dimensions. The size required is 10 ft. x 20 ft., and they are proposing 9 ft. x 18 ft. He believes that width is ample. They are also requesting waivers for the location of the driveway. The driveway on the property next door is currently located very close to theirs. No loading area is provided as they only expect Federal Express type vehicles and not large vehicles. In Phase I they will also be requesting a waiver for the type of lights as they are shoebox lights. They do not want to put up lights and move them a year later. They are also proposing garbage cans in an enclosure for Phase I. The LOI has been extended for another 5 years. Signage will be discussed in depth during the testimony of the architect.

Addressing Mr. Simon, Esq. on the retaining wall on the property, Mr. Fantina stated their property is relatively flat and they have plans to change the wall. Mr. Hansen advised that the wall he is referring to is halfway back and there is grading over the wall. The plans need to be clarified.

Mr. Hansen advised that given the extent of the technical issues, the applicant should submit revised plans to the Board before continuing. They must be in the Board office a minimum of ten (10) days prior to the next hearing. Chair agreed.

Chair Seavey also stated that in the future the Board may also request a site visit. Mr. Simon, Esq. advised that it would be of benefit to the Board to hear the architectural testimony before going to the site.

Chair advised that the hearing would be carried to the Tuesday, May 3 regular meeting of the Board. Mr. Simon, Esq. advised that no further notice would be given.

ADJOURNMENT

There being no additional business to come before the Board, on motion duly made, seconded and carried, Chair Seavey adjourned the meeting at 10:45 p.m. The next regular meeting of the Board of Adjustment will be held on Tuesday, May 3, 2011 at 7:30 p.m.

Respectfully submitted,

Diana Callahan
Recording Secretary