



TOWN OF NORTHBOROUGH PLANNING BOARD

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Approved 1/19/16

Planning Board Meeting Minutes October 6, 2015

Members in attendance: Theresa Capobianco, Chair; George Pember; Amy Poretsky; Michelle Gillespie

Members excused: Leslie Harrison

Others in attendance: Kathy Joubert, Town Planner; Elaine Rowe, Board Secretary; David Maxson, Isotrope Wireless; Chris Swiniarski, Verizon Wireless; Dave Tivnan, Verizon Wireless; Keith Vellante, Verizon Wireless; Serge & Gabe Prepetit, 31 Juniper Brook Road

Chair Theresa Capobianco called the meeting to order at 7:08PM.

Continued Public Hearing – Proposed Wireless Communications Facility at 386 West Main Street, including discussion with town’s consultant David Maxson, Isotrope Wireless

Applicant:	Verizon Wireless
Engineer:	Chappell Engineering Associates, LLC
Date Filed;	June 30, 2015
Decision Due:	Within 90 days of hearing

Ms. Capobianco noted that the board had asked for input from an industry consultant and the opinion of Town Counsel regarding the definition of a “significant gap in coverage”.

Mr. Maxson explained that the applicant had provided two types of coverage maps that are customary in these types of proceedings. He noted that the first is a map showing the coverage in the area without the proposed facility, using a threshold of service that provides very good quality of service, while the second map shows existing conditions plus the additional coverage from the proposed facility. He commented that, as depicted, the area is under-served according to the applicant’s thresholds. He also stated that he has not yet done his own research, but would still like the opportunity to do so if the board agrees.

Mr. Maxson noted that the applicant’s position is that there exists a gap in terms of good quality coverage for the LTE service that they are modeling. He also noted that the other maps provided are more complicated to understand, since they use a different signal level threshold and may include people on the outskirts putting demands on the

service. He commented that the applicant has provided a “best server map”, which illustrates the area where each sector of each cell site is the dominant provider of service and shows those areas where other towers are currently providing service that will be served by the proposed tower. Mr. Maxson stated that, when capacity claims are being made, he looks for more data that shows that there is a capacity crunch or for trends that would predict one. He explained that the coverage maps (attachment C in the packet) include color-coding and noted that the areas shaded in yellow are areas served by other sectors and are not relevant. He indicated that sectors from Northborough 4 and Northborough Beta, with the red footprint, are areas where those two facilities are predicted to be the dominant ones providing service. He also noted that the second map (attachment D) overlays the coverage from three sectors from the proposed facility (Northborough 5) where it would become the dominant provider, some of which currently have a modicum or even good service. He commented that the areas shaded in blue do not have a high density of streets, and it appears that there is a large area receiving a signal and capacity replacement even though it doesn’t appear that there are many people there. He noted that the applicant has provided some population counts based on census blocks (very rough estimates), and to the degree that you can use census blocks it appears that the Northborough 4 sector has some 3,000 “pops” (residential population). The new Northborough 5 facility would offload about 10% which does not appear to make a significant reduction on the capacity demands on the existing facilities.

Mr. Maxson stated that he would ask the applicant to provide some type of statistical information that shows that the existing coverage is near capacity overload. He noted that the primary argument is that the town has an area that is outside the reach of the existing sites for provision of good quality service, and he would want to validate that using his own techniques. He stated that he stays away from pronouncing whether there is a gap and whether the gap is “significant” because that is a legal construct and you have some advice from legal counsel on that. He will provide his interpretation of the applicant’s information, review his own data, and tell if I think the service is above or below the applicant’s threshold, whether their population counts are reliable, traffic data, traffic counts in the right places, basically to validate the evidence put on the record. Based on that info you can decide if there is a significant gap and to what extent that gap exists. Mr. Maxson stated at the moment he is discounting the capacity claim based on his description the primary claim from the applicant is based on the white space on the map.

Mr. Pember voiced his understanding that, while there is not a lot of population in the area, there are two major thoroughfares and questioned whether that would be substantial in trying to establish the existence of a significant gap. Mr. Maxson explained that there have been a number of different measures used over the years, and noted that the report from Town Counsel references a case in the town of Lincoln that was all about coverage on Route 2. Ms. Poretzky commented that she would not consider West Main Street to be a major thoroughfare comparable to Route 2. Mr. Maxson asked if the applicant had obtained traffic counts to support their argument

that the gap is significant. Mr. Swiniarski indicated that he did not provide any, but stated that every single road is a factor. Mr. Maxson noted that Route 20 is a numbered state road, which might in itself be indicative of its importance. He suggested that it might be helpful to obtain traffic counts.

Mr. Maxson voiced his opinion that, in terms of coverage to residential areas and the prospect of offloading, it would be better if the proposed facility can be moved closer to West Main Street in order to have more overlap in the more densely populated area. He also questioned whether there are any potential alternative sites that might be less objectionable. He noted that he has not yet done research into that, but it would be something that he would explore.

Mr. Pember asked if, when evaluating demand, the board is supposed to be looking out to the future or basing their decision on what currently exists. Mr. Maxson stated that this is a gray area that Town Counsel has already addressed. He noted that if the applicant's position is that they are *anticipating* a capacity shortfall by say 6, 12 18 months, the further out the more uncertainty there is on whether it is needed and whether this facility is the right or best solution. What he has seen presented to the record are actual trends with a table of what has happened in growth and demand for the last 2 or 3 years and the trending curves would suggest the date when the existing cell sites will max out. He stated that, if the capacity argument is one that the applicant is strongly relying on, it might be beneficial if they provided some of that information to show they are at the edge or overloaded now. That in x number of months they expect the sectors to be overloaded.

Mr. Maxson stated that Town Counsel has provided an opinion about the issue of the school. He noted that the applicant has provided their rationalization as to why the board can find in their favor, and it is up to the board to evaluate all of these factors. He expressed a desire for the applicant to provide him with the transmitter table. He indicated that, while information is already provided in Mr. Vellante's report, he needs further data to replicate the model and validate the coverage maps.

Mr. Maxson noted that the applicant has been asked about reducing the height of the tower, and their response was understandably dismissive. He suggested that this request may be critical and might mean the difference between the project being objectionable or not. He also commented that there are other, more specific steps that the applicant can take. He noted that, if consideration of a 75-foot tower is of keen interest, the applicant could be asked to do a Continuous Wave (CW) test to determine the difference in coverage between a 100-foot tower and a 75-foot tower. He stated that the downside to a shorter tower is that it reduces the co-location potential for other carriers. He reiterated that, if reducing the tower by 25 feet is of value to the community, a CW test would be a means to validate that. He emphasized the importance of moving quickly, as it is always better to conduct these tests when the leaves are on the trees.

Mr. Maxson explained that there is a standard way to sketch monopines and stated that, if the monopine design is acceptable to the board, the actual tree pole can vary considerably. He referenced a tree pole in Charlton that is quite sparse as well as one in Harvard that is so dense that you cannot see the antennas at all. He noted that, if the board opts to approve the monopole, he would recommend agreement on the design in advance so that it can be included as a condition in the decision.

Ms. Poretsky noted the existence of a monopole at 300 West Main Street and asked if it can ever be expanded upon. Mr. Maxson voiced his understanding that that pole is full, but suggested that town staff make a phone call to verify. He stated that these poles are not generally constructed to support a future height extension and noted that the following would be needed in order to add to the existing unipole:

1. Antennas external to the pole would be attached below the hidden antennas, as was done in Nahant.
2. An ability to extend the height of pole and add to the top. Mr. Maxson noted that, structurally, this is usually not possible so would require the pole to be replaced, which is typically not favored.

Mr. Maxson stated that, when you compact all of the antennas inside a single cylindrical pole, you need more vertical space for each carrier. He also noted that some companies require a 15 to 20 foot slot to fit all of their antennas. He also commented that coaxial cables waste power and do not achieve the same quality results.

Ms. Poretsky asked about putting antennas on the exterior of the pole. Mr. Maxson explained that mounting antennas on the outside of a pole instead of having a 12 or 14-foot mounting frame results in a clustering problem around the pole. He commented that the issue is reduced with the use of radio heads, as clustering of radio heads would only take up a diameter of 6 or 8 feet instead of the 12 to 14 feet needed for a mounting rack. He noted, however, that any time you do that, the result is that it is harder to make changes in the future and, therefore, the applicant may not be able to provide the most effective coverage. He commented that there are always tradeoffs but if those tradeoffs are important to the board in order to achieve a particular visual effect, then it is open for discussion. Ms. Poretsky suggested that moving the tower towards Route 20 (on the monopole) might benefit more people as it is more densely populated than the West side of town where the trail head is. Mr. Maxson stated that he has no knowledge of what other properties might be available, but reiterated his suggestion to move it further away from the Shrewsbury line. Coverage in Shrewsbury is not Northborough's responsibility but carriers try to place facilities so they connect to other facilities. He solicited suggestions for other properties that people have in mind that might be less objectionable.

Ms. Capobianco asked Ms. Joubert about the deadline for the decision, based on the opinion of Town Counsel. Ms. Joubert indicated that she had calculated the deadline to be November 20, 2015. Ms. Capobianco commented that the board has a bit more time than originally thought and asked Mr. Maxson if it would be useful to have additional

statistical information to assist the board in reaching their decision. Mr. Maxson stated that he does not believe a strong argument has been made for the capacity issue, so he would welcome additional information to illustrate the need if the applicant is so inclined.

Ms. Gillespie asked about the CW test. Mr. Maxson agreed to speak with the applicant about their willingness to conduct the test and provide the data. Ms. Gillespie requested information about the existing monopole that might help the board in reaching a decision. Ms. Capobianco requested that the applicant provide the transmitter tables to Mr. Maxson for his review. Mr. Swiniarski stated that he did not have much time to review the written materials, but agreed to provide additional information per the board's request. Mr. Maxson suggested that the traffic information, which the applicant has failed to provide, might be valuable to the board. He also asked if the board would be interested in learning more about the capacity loading or trending. Ms. Capobianco noted that she has not seen any data. Mr. Maxson stated that the applicant has not provided any data showing an immediate risk of overload. Based on best server plots he also doesn't see a significant dent in the potential loading, Gamma 4, he is showing some population take over but it is not a significant population. Given those 2 factors Mr. Maxson stated he is not seeing that capacity is a big concern.

Ms. Capobianco questioned the reference to 700 households. Ms. Joubert noted that the figure was included in the application, but voiced her understanding that the applicant is looking to reach the vehicular user as opposed to households. Ms. Capobianco voiced her opinion that the applicant should provide traffic data. She also asked for details about where the "700 households" figure came from. Mr. Maxson suggested that the applicant provide maps with population counts with and without the proposed facility to illustrate the increase in population served with the addition of Northborough 5. Ms. Capobianco asked Mr. Swiniarski to provide these details.

Ms. Joubert asked about the population increase, and asked whether traffic data will include projected traffic or just current conditions. Mr. Swiniarski stated that the thrust of what they are asking for is not to serve the projected need in the future. Mr. Maxson indicated that the vehicular traffic data would be current traffic counts. Ms. Joubert noted that, at previous hearings, Mr. Swiniarski had mentioned addressing projected needs. Mr. Swiniarski emphasized that the need exists currently. Ms. Capobianco noted that, up until now, the argument has been that the applicant is anticipating a future need so current traffic counts may not be helpful. She voiced apprehension about approving the installation of another cell tower for something that may or may not happen in the future. Ms. Capobianco reiterated that a traffic study may prove helpful to the board.

Ms. Capobianco asked if technology has advanced such that some of the existing antennas can be upgraded without having to erect a new pole. Mr. Maxson noted that, with the addition of another 20 MHz of spectrum, you can add to existing cell sites as long as you have room to add the new antenna. He noted that carriers are looking for

ways to increase capacity by adding new frequency bands, and the closer the towers get to each other, the shorter they can be.

Ms. Joubert noted that, at the last meeting, there was some discussion about the standard timeframe for a special permit application. She stated that Town Counsel has indicated that boards are required to make a ruling within 150 days of the filing of an application. She asked Mr. Swiniarski if he is of the opinion that boards must act within 135 days. Mr. Swiniarski commented that federal law provides a longer timeframe. Ms. Joubert indicated that she would be more comfortable having the issue clarified by Town Counsel. Mr. Swiniarski agreed.

Mr. Maxson explained that the FCC assumes that a decision can be made in 150 days of application and, if not, the applicant has the ability to bring the matter to court. He noted that, as a practical matter, he has rarely seen an applicant do so.

Ms. Joubert stated that all of her notes from prior meetings have references to Mr. Swiniarski representing that this tower is needed not so much for the people in the homes but for those driving in the area. She also noted that Mr. Swiniarski referred to future growth and being able to meet future demand. Mr. Swiniarski stated that, while he did discuss growth and the increase in demand, those factors are not the basis for this application. He also agreed to provide the traffic counts as requested.

Ms. Capobianco asked Mr. Maxson to address the difference in terminology between “gap in significant coverage” and “significant gap in coverage”. Mr. Maxson commented that they both mean the same thing to him.

Ms. Gillespie asked about the CW test, and noted that the question is whether or not the proposed tower is even necessary. Ms. Poretsky agreed, and expressed her desire for town staff to reach out to the owner to determine if there is availability on the existing tower. Mr. Maxson stated that simply looking at the active electric meters on the existing tower will enable the town to determine if it is full or not.

Michelle Gillespie made a motion to continue the hearing to October 20, 2015 at 7:15PM. George Pember seconded; motion carries by unanimous vote.

Consideration of Minutes – George Pember made a motion to accept the Minutes of the Meeting of July 2, 2015 as amended. Michelle Gillespie seconded; motion carries by unanimous vote.

George Pember made a motion to accept the Minutes of the Meeting of August 4, 2015 as amended. Michelle Gillespie seconded; motion carries by unanimous vote.

Variations - Ms. Gillespie asked Ms. Joubert if the board can discuss nonconforming/use variations at an upcoming meeting. Ms. Joubert stated that the town has many pre-existing, nonconforming properties, so anytime there is a change it is a change to a pre-existing, nonconforming use or structure. Ms. Poretsky indicated that she is more concerned with commercial properties. Ms. Capobianco asked Ms. Joubert to provide data on applications for such variations over the past 3 years. Ms. Poretsky expressed a desire to look at use variations as well. Ms. Joubert agreed to provide an updated list.

Master Plan - In response to a question from Ms. Gillespie, Ms. Joubert indicated that she has not yet begun working on the Master Plan. Ms. Gillespie asked if it might be possible to get to it before year end. Ms. Joubert expressed an intention to do so, but reiterated that she has limited resources.

ZBA applications – Ms. Joubert noted that all applications for the next ZBA meeting are for residential projects as follows:

- **78 Indian Meadow** – construction of a deck on a pre-existing, non-conforming house
- **70 Summer Street** – this application is for a house that has always been used as a 3-family home but taxed and referenced as a 2-family. The applicant is seeking a variance and special permit from the Groundwater Advisory Committee to continue as a legal 3-family home
- **259 Crawford Street** – application to convert a garage into an accessory dwelling, a use that is allowed by special permit.

Ms. Joubert explained that, at their last meeting, the ZBA approved variances for a U-Haul facility on Bearfoot Road. She indicated that U-Haul will be coming back to meet with the Design Review Committee (DRC) and for site plan review.

Ms. Joubert also noted that the ZBA had approved the petition for a pylon sign on the property at 1C Belmont Street with the condition that it would be the only use allowed on the site. She explained that the applicant currently has a special permit for a used car dealership, so will now need to decide between the car lot and pylon sign.

Meeting adjourned at 8:43pm.

Respectfully submitted,

Elaine Rowe, Board Secretary