

OBJECTIONS TO THE PLACEMENT OF THE VERIZON CELL TOWER IN THE  
BRACKETT ROAD RESIDENTIAL DISTRICT OF RYE, N. H.

Submitted Document of 11pp. to the Town of Rye Planning Office and Planning Board Members  
on Jan. 22, 2018 Re: Case #03-2018

**We wish to make it clear that we are not opposed to enhanced cell phone service in the Rye community.**

**However, we should not be required to risk our health, property values and aesthetic concerns in our residential district just so a cell phone tower can be installed when there are alternative sites available for such construction**

**We urge Verizon to refrain forthwith from its continuing effort to placing a cell tower in a Rye residential district and to consider the alternatives within this document.**

**We therefore respectfully submit the following document for consideration in which our objections are set forth for opposing the proposed construction of a cell tower in our residential district and for providing existing options that can and should be pursued.**

Robert and Kendra Gemmett  
150 Brackett Road  
Rye, NH 03870

**I. VERIZON IS REQUESTING TWO VARIANCES SIMULTANEOUSLY TO BUILD A CELL TOWER IN A SINGLE RESIDENTIAL DISTRICT WHICH SHOULD NOT BE PERMITTED**

Verizon is requiring two variances at the same time to construct a cell tower in a residential district. The first is a use variance to in effect lease privately-owned land in a single residential district and the second is a variance to avoid the current Town of Rye requirement to locate any new cell towers in the Overlay District. **Both variances should be denied for reasons outlined in this document.**

We bought or built our homes in a district designated by the Town of Rye as residential. We believed and trusted that it would remain residential. Insertion of a commercial venture by Verizon, designed to profit from cell-phone use, dramatically alters that designation and violates the trust we believed protected us from a fundamental change in the characterization of our district. Approval of these variances would constitute **a betrayal of that trust.**

**II. THE ERECTION OF A 125 FT. TOWER IS ANTITHETICAL TO THE ENVIRONMENT, AN INTRUSIVE EYESORE THAT DOES NOT BELONG IN THIS SETTING.**

**We note that this is an important issue for consideration in the approved zoning ordinances of the Town of Rye regarding Wireless Telecommunications Facilities, as stated: to ‘reduce adverse impacts on aesthetics [and] environmentally sensitive areas’. See *Town of Rye Zoning Ordinance*, Sect. 505, p. 68.**

A major reason for living in the Brackett Road area has to do with the natural environment of woods, marshes, creeks and the ocean. Masking the tower as a monopine does not alleviate the situation. No matter how much you try to mask a 125 foot tower, it is still a cell tower -- basically a massive artificial and ugly intrusion on the landscape.

### **III. THESE VARIANCES WOULD BE INJURIOUS TO THE NEIGHBOURHOOD AND ALTER ITS CHARACTER.**

The presence of a 125 foot tower extending approximately 50 feet above the existing tree line would benefit Verizon financially and the resident who will receive lease payments from this company at the expense of all of the other home and property owners in the area.

**There is no justification for erecting a tower in the midst of a single residence community when it could be placed on other sites in Rye classified as non-residential.**

We note in Verizon’s application that **no balloon test** has been conducted which would demonstrate how visible their cell tower would be on the north side of Rye.

What Verizon is proposing is that this giant tower **would be placed only 50 feet or less from the road** between two houses and exposed to houses across the road all within close proximity of each other. Is Verizon really concerned about aesthetics when it intends to denude the landscape by clearing 23 mature trees 6 feet in diameter in proximity of a wetland, installing a gravel road to a 30 x 40 foot area, enclosed by a 8 foot fence, a 12 x 17 a concrete pad, a 125 foot tower with 12 panels, 6 remote radio heads, a fiber junction box at the top, 2 equipment cabinets, a propane generator, overhead metal canopy, a 500 gallon propane tank on another concrete pad along with utility runs to a utility pole? All of this will be quite visible and imposing as people drive or walk on Brackett Road **and the tower will be seen from many points in the surrounding area well exposed above the tree line.**

**In short, this is a plan that will dramatically diminish and insult the aesthetics of the neighbourhood.**

### **IV. THESE VARIANCES WOULD ALSO ESTABLISH AN UNWELCOMED PRECEDENT FOR OUR NEIGHBORHOODS IN RYE.**

This variance request seeks to overturn established zoning designations in the Town of Rye through a variance procedure that allows a single property owner to benefit financially by allowing residential property to be used for a commercial purpose from which other property owners in the area are excluded. It sets a legal precedent for it to happen elsewhere in the town.

### **V. THE TOWN OF RYE SHOULD NOT TOLERATE EXCLUSIVE FINANCIAL ARRANGEMENTS BETWEEN A COMMERCIAL ENTITY AND A SINGLE RESIDENT THAT UNDERMINES SINGLE RESIDENT ZONING**

**If properly located on Town property, the Town of Rye would receive payments to the benefit of all tax-payers in the community. The Verizon application excludes this arrangement and benefits one resident to the detriment of other citizens of this community.**

## **VI. A CELL TOWER WILL NEGATIVELY AFFECT THE NEIGHBORHOOD'S PROPERTY VALUES**

**In the *Rye Citizens Handbook* (2016) the section on the Zoning Board of Adjustment makes it clear that a petitioner for a variance must show that “no diminution in the value of surrounding properties would be suffered”. (p. 100). See also *Town of Rye Zoning Ordinance*, item C., p. 68 which refers to reduction of adverse impacts on “property and property values” as a goal of their guidelines.**

**IN THE ATTACHED REPORT, WE HAVE COMPILED RESEARCH** which demonstrates that media attention to the potential health hazards of cell towers has spread concerns among the public about living near the cell towers and resistance to buying property in these areas.

One of these studies by Dr. Sandy Bond “The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods,” *The Appraisal Journal*, Summer 2005 concluded the following:

**“that homebuyers would pay from 10%–19% less to over 20% less for a property if it were in close proximity to a cell phone base station. The ‘opinion’ survey results were then confirmed by a market sales analysis. The results of the sales analysis showed prices of properties were reduced by around 21% after a cell phone base station was built in the neighborhood.” [italics ours]**

Another study conducted by The National Institute for Science, Law and Public Policy’s survey “Neighborhood Cell Towers & Antennas—Do They Impact a Property’s Desirability?” initiated June 2, 2014, was completed by 1,000 respondents as of June 28, 2014.

The overwhelming majority of respondents (94%) reported that cell towers and antennas in a neighborhood or on a building would impact interest in a property and the price they would be willing to pay for it. **And 79% said under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower or antenna.**

## **VII. A CELL TOWER POSES A THREAT TO THE HEALTH AND SAFETY OF THE NEIGHBORHOOD**

A paramount consideration is the potential adverse health impacts of constant RF radiation and noise from Cell Towers and Cell Antennas, when a wireless company files any type of zoning application seeking to install them.

National studies show that sound engineers have found measurements of high ambient noise that a proposed tower site would cause. The engineers determined that the tower facilities need

cooling by fans, and that the fan noise would be audible to nearby residents, especially on summer nights with open windows.

**Citizens of the community and the officials of the Town of Rye should be mindful of this issue as a major reason why there is increased concern about what the health impact would be and why it affects personal and family concern as well as property values.**

The Telecommunications Act of 1996 is a law which stripped all States and local governments of their power to consider the potential adverse health impacts of RF radiation from Cell Towers and Cell Antennas, when a wireless company files any type of zoning application seeking to install them. **However, this does not mean that negative effects of electromagnetic radiation do not exist and have an impact.**

The health risks associated with living near cell phone tower/antennas are something we cannot risk. The adverse health effects documented at levels below FCC guidelines, include altered white blood cells in schoolchildren; childhood leukemia; impaired motor function, reaction time and memory; headaches; dizziness; fatigue; weakness; and insomnia. These results are based on epidemiological studies of people living near cell-phone antennas in Spain, the Netherlands, Germany, Austria and Israel.

The European Parliament, representing all the member nations of the European Union, "concerned about the continuing uncertainties about possible health risks concerning magnetic radiation," adopted a report recently by a vote of 559 to 22 providing that "the placement of antennas, mobile phone masts and high-voltage power lines be negotiated between industry actors, public authorities and residents' associations in order to minimize health risks and legal-action cases".

**PLEASE SEE ATTACHED COMPILED RESEARCH** which demonstrates that media attention to the potential health hazards of cell towers has spread concerns among the public about living near the cell towers and resistance to buying property in these areas.

**VIII. THE ZONING BOARD DOES NOT CONSIDER WIRELESS TELECOMMUNICATIONS FACILITIES AN ESSENTIAL INFRASTRUCTURE SERVICE AND THEREFORE SHOULD NOT IMPOSE ARBITRARILY A CELL TOWER ON A RESIDENTIAL DISTRICT.**

We draw attention to the Zoning Board's own words: that "Wireless telecommunications facilities shall not be considered infrastructure essential services, public utilities or public utilities buildings. . . . Siting for telecommunications facilities is a use of land." *Town of Rye Zoning Ordinance* 505.4 item D and that they would "permit the construction of new towers only when all other reasonable opportunities have been exhausted..." See *Town of Rye Zoning Ordinance*, item E., p. 68.

**IX. THERE IS NO NEED FOR VERIZON TO BUILD A CELL TOWER IN A SINGLE RESIDENTIAL DISTRICT OF RYE.**

We believe that if the Town of Rye wishes to support the inclusion of a new cell tower in Rye that it locate it in **a commercial or industrial site or on town-owned property** removed from residential areas entirely, which is in keeping with what is happening elsewhere in this country.

The December 2017 edition of the Town of Rye newsletter has also noted that Senator Innis was advised that there **are areas of land in Rye which are owned by the State** that might provide a solution to this problem.

**X. THE TOWN OF RYE HAS ESTABLISHED A TELECOMMUNICATIONS FACILITIES DISTRICT FOR CELL TOWERS. VERIZON IS REQUIRED TO USE THE OVERLAY DISTRICT BUT THEY ARE REQUESTING A SECOND VARIANCE INSTEAD**

Placement of a tower in this overlay is in accordance with the Zoning Board's original plan and current requirement. Verizon is requesting a variance from this requirement that wireless facilities should be limited to the Overlay District. **This second variance should be denied for all of the reasons set forth in this document.**

Verizon has been consistently avoiding use of the Overlay District. They have tried instead to obtain consideration from other sites, such as Pulpit Rock Lookout Tower, the Rye Elementary School, Odiorne State Park, and two other residential properties. Site selection cannot be the exclusive choice of Verizon yet they persist in trying to locate a tower in residential areas of Rye.

**XI. THERE IS NO PROVISION BY THE PLANNING BOARD OF TOWN OF RYE FOR A DIFFERENT OVERLAY DISTRICT SITE AT THE PRESENT TIME**

Should there be a need for a new district other than the Overlay District prescribed by the Town of Rye, then the planning board should find locations and submit a new plan and ordinance to the electorate as indicated by the following zoning guideline:

***Town of Rye Zoning Ordinance, Item D, p. 68 of their own current ordinance says: "Provide for co-location and minimal impact siting options through an assessment of technology, electronic compatibility, current locational options, future available locations, innovative siting techniques, and siting possibilities beyond the political jurisdiction of the town."***

To our knowledge no process of this kind has been initiated to date by the Planning Board

**XII. A CENTRAL FLAW WITH THE VERIZON REQUEST IS THAT "ALL OTHER REASONABLE OPPORTUNITIES" FOR CELL TOWER LOCATION HAVE NOT BEEN EXHAUSTED AS REQUIRED BY THE ZONING BOARD.**

**In addition to the established telecommunications overlay in Rye, the consideration of alternate town-owned property, commercial or industrial sites, or state property, there is also newer technology that could be considered: what is called the "small cell" or 'distributive antenna system'.** Cellular arrays can be installed on high voltage utility power poles at a much lower cost in Rye. They can place the cells on utility poles that allow it to

improve service in hard-to-reach area in a short period of time. **These small power units have been designed to make the single tower obsolete making the currently proposal for a tall tower unnecessary.**

Joseph Stephenson in a letter to the Portsmouth Herald on Dec. 28, 2017 believes that there is a reluctance to move to this newer technology that makes the cell tower obsolete: “Verizon and the tower developers do not want to talk about DAS [distributive antenna system] because a tall tower would be much more profitable. . . . you can rent space on the tower to other companies that want to add antennas. If Verizon is really concerned about customer service and public safety, they could have a DAS system up and operating in a few months. But in this case, concerns about “service” and “safety” seem to be less important than “Return on Investment”.

## I. SUPPORTING DOCUMENTATION FOR THE NEGATIVE IMPACT OF CELL TOWERS ON PROPERTY VALUES.

### Actual reports on property value decrease:

A. The definitive work on this subject was done by Dr. Sandy Bond, who concluded that “media attention to the potential health hazards of [cellular phone towers and antennas] has spread concerns among the public, resulting in increased resistance” to sites near those towers. Percentage decreases mentioned in the study range up to 20%.

Here are two of her studies:

Sandy Bond, Ph.D., Ko-Kang Wang, “The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods,” The Appraisal Journal, Summer 2005.

This study indicated that **homebuyers would pay from 10%–19% less to over 20% less for a property if it were in close proximity to a cell phone base station.** The ‘opinion’ survey results were then confirmed by a market sales analysis. **The results of the sales analysis showed prices of properties were reduced by around 21% after a cell phone base station was built in the neighborhood.”**

"The effect of distance to cell phone towers on house prices" by Sandy Bond, Appraisal Journal, Fall 2007, see attached. Source, Appraisal Journal, found on the Entrepreneur website, [http://www.prres.net/papers/Bond\\_Squires\\_Using\\_GIS\\_to\\_Measure.pdf](http://www.prres.net/papers/Bond_Squires_Using_GIS_to_Measure.pdf)

### In addition, click on Internet Links to see the following articles:

Get the Cell Out - ATL: Yes, a Cell Tower Will Lower Property Values ...

Real Estate Devalued When Cell Towers Are Erected

**B. The Appraisal Institute** is the largest global professional membership organization for appraisers with 91 chapters throughout the world. The Institute spotlighted the issue of cell towers and the fair market value of a home and educated its members that a cell tower should, in fact, cause a decrease in home value. ([www.appraisalinstitute.org](http://www.appraisalinstitute.org))

**“Even buyers who believe that there are no adverse health effects from cell phone base stations, knowing that other potential buyers might think the reverse, will probably seek a price discount for a property located near a cell phone base station.”**

**C. The National Institute for Science, Law and Public Policy’s** survey **“Neighborhood Cell Towers & Antennas—Do They Impact a Property’s Desirability?”** initiated June 2, 2014, has now been completed by 1,000 respondents as of June 28, 2014. The survey, which circulated online through email and social networking sites, in both the U.S. and abroad, sought to determine if nearby cell towers and antennas, or wireless antennas placed on top of or on the side of a building, would impact a home buyer’s or renter’s interest in a real estate property.

**The overwhelming majority of respondents (94%) reported that cell towers and antennas in a neighborhood or on a building would impact interest in a property and the price they would be willing to pay for it. And 79% said under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower or antenna.**

**D. James S. Turner, Esq., Chairman of the National Institute for Science, Law & Public Policy and Partner, Swankin & Turner in Washington, D.C., says,**

**“The recent NISLAPP survey suggests there is now a high level of awareness about potential risks from cell towers and antennas. In addition, the survey indicates respondents believe they have personally experienced cognitive (57%) or physical (63%) effects from radiofrequency radiation from towers, antennas or other radiating devices, such as cell phones, routers, smart meters and other consumer electronics. Almost 90% are concerned about the increasing number of cell towers and antennas generally.**

**E. See also an article from the New York Times on cell towers and property values:**

[http://www.nytimes.com/2010/08/29/realestate/29Lizo.html?\\_r=2&ref=realestate](http://www.nytimes.com/2010/08/29/realestate/29Lizo.html?_r=2&ref=realestate)



## II. SUPPORTING DOCUMENTATION FOR THE NEGATIVE IMPACT OF CELL TOWERS ON HEALTH

In a recent article on “The Hidden Health Effects of Cell Towers, Andrea Fabry presents the following:

The Federal Communications Commission, our government’s regulating agency, has made sure health concerns *aren’t addressed* when cell tower applications are considered. According to the Telecommunications Act of 1996,

How well is the FCC monitoring these levels [of electromagnetic radiation]?

**Sen. Richard Blumenthal of Connecticut and Rep. Anna Eshoo of California** believe the FCC has dropped the ball when it comes to monitoring and regulating the safety of cell towers, especially when it comes to cell site workers. The lawmakers issued a [challenge to the FCC on September 17, 2015](#). Here’s what they had to say:

Excessive exposure to RF radiation leads to well-documented potential harms, especially to workers who spend time near the antenna and in the line of the antenna’s beam. At sufficient power levels and exposure durations, RF radiation has the ability to heat biological tissue. Thermal effects can include eye damage, sterility, and cognitive impairments.

We urge the FCC and the Occupational Safety and Health Administration (OSHA) to work together to enforce exposure limits and ensure wireless carriers are taking the required precautions to **protect the safety of all persons who may be exposed to dangerous levels of RF radiation near wireless towers.**

**IF THE FCC AGREES THAT CELL TOWER WORKERS ARE AT RISK, AND TWO MEMBERS OF CONGRESS ARE CONCERNED ENOUGH TO ISSUE A REPRIMAND, WHAT DOES THIS SAY ABOUT THE OVERALL SAFETY OF CELL SITES?**

Fabry provides the following further studies that demonstrate a health risk:

The World Health Organization officially classifies electromagnetic radiation a [possible 2B carcinogen](#). (The same category as lead, DDT, and styrene.)

The following studies suggest short-term and long-term health risks within 1,000-1,400 feet of a cell tower.

- [Kempton West Study \(2007\)](#)

Researchers measured blood levels of serotonin and melatonin in 25 participants before and after the activation of a new cell site. There were unfavorable changes in almost all participants.

- [Naila Study \(2004\)](#)

Researchers discovered a threefold increase in cancers after five years exposure to microwave radiation from a nearby mobile phone mast transmitter compared to those patients living further away.

- [France Questionnaire \(2003\)](#)

Researchers in France found significant health effects on people living within 300 meters of mobile phone base stations. Fatigue, sleep disturbance, headaches, concentration problems, depression, memory problems, irritability, cardiovascular problems, hearing disruption, skin problems, dizziness, etc.

(For a comprehensive list of studies linking cell towers to adverse health effects, see [Electromagnetic Health](#).)

As noted above current FCC regulations are based on thermal effects. Thanks to the [BioInitiative Report 2012](#) we now have a compilation of more than 1800 studies showing biological effects from non-ionizing radiation.

In May 2016, the U.S. government released preliminary findings for a \$25 million rat study linking cell phone radiation to cancer. See [NTP Study: Cell Phones and Cancer](#)..

A most recent and helpful group of health studies on this matter has been compiled and provided online by a group of 47 citizens of Atherton, California who petitioned the town authorities to stop putting cell towers in the residential community. They cite health concerns as one of their major issues. Here is the evidence they supplied in their petition worthy of review and consideration:

**A.** Radiofrequency radiation emitted from these antennas 24 hours a day every day. We can turn off our cell phones, but we cannot turn off the signal from these antennas which are affecting us while we sleep.

**B.** The health risks associated with living near cell phone tower/antennas are something we cannot risk. The adverse health effects documented at levels below FCC guidelines, include altered white blood cells in schoolchildren; childhood leukemia; impaired motor function, reaction time and memory; headaches; dizziness; fatigue; weakness; and insomnia. These results are based on epidemiological studies of people living near cell-phone antennas in Spain, the Netherlands, Germany, Austria and Israel.

**C.** The European Parliament, representing all the member nations of the European Union, "concerned about the continuing uncertainties about possible health risks concerning magnetic radiation," adopted a report on April 2, by a vote of 559 to 22 providing that "the placement of antennas, mobile phone masts and high-voltage power lines be negotiated between industry actors, public authorities and residents' associations in order to minimize health risks and legal-

action cases. This will also ensure that EMF-transmitting devices are kept clear of schools, crèches, retirement homes and health-care institutions."

**D.** Study which verifies the existence of a spatial correlation between base station (BS) clusters and cases of deaths by neoplasia in the Belo Horizonte municipality, Minas Gerais state, Brazil, from 1996 to 2006 and to measure the human exposure levels to EMF where there is a major concentration of cellular telephone transmitter antennas.

<http://www.ncbi.nlm.nih.gov/pubmed/21741680>

**E.** Increased incidence of cancer near a cell phone transmitter station:

[http://www.powerwatch.org.uk/news/20050207\\_israel.pdf](http://www.powerwatch.org.uk/news/20050207_israel.pdf)

**F.** How does long term exposure to base stations and mobile phones affect human hormone profiles? "In conclusion, the present study revealed that high radio frequency radiation effects on pituitary adrenal axis represented in the reduction of ACTH, cortisol, thyroid hormones, prolactin in young females, and testosterone levels."

<http://www.sciencedirect.com/science/article/pii/S0009912011027330>

**G.** More evidence that RF fields impact thyroid hormone:

Results: Morphological analyses revealed hypothyrophy of the gland in the 900 MHz RF exposure group. The results indicated that thyroid hormone secretion was inhibited by the RF radiation. In addition, we also observed formation of apoptotic bodies and increased caspase-3 and caspase-9 activities in thyroid cells of the rats that were exposed to modulated RF fields.

Conclusion: The overall findings indicated that whole body exposure to pulse-modulated RF radiation that is similar to that emitted by global system for mobile communications (GSM) mobile phones can cause pathological changes in the thyroid gland by altering the gland structure and enhancing caspase-dependent pathways of apoptosis

<http://www.ncbi.nlm.nih.gov/pubmed/20807179>