

2/5/19

Dear Members of the Marin County Board of Supervisors,

We at 5G Free Marin are pleased to provide you with a list of recommendations and supporting documentation to support your efforts to update your wireless ordinance for the County of Marin.

We believe that this comprehensive list contains several of the most effective elements to protect the safety and property of Marinites for the roll out of 5G wireless technology. Most of these recommendations are currently being added to wireless ordinances in other Marin jurisdictions, such as in San Anselmo, San Rafael and Fairfax.

We urge you to consider these recommendations as other cities/towns have done, and to provide strong leadership for the rest of the cities and towns in Marin that have not yet begun this process, in order to protect Marin's citizens and property from this untested technology.

The document below contains a list of recommendations. In a separate document, please find our "Attachments", containing additional supporting documentation.

These documents represent many hundreds of hours of volunteer time from those of us working tirelessly on this issue.

We would very much like to have an opportunity to share in person more details about this technology and specific community concerns, and hope to meet with each of you on this matter.

Thank you so much for taking the time to consider these requests as you move forward to create a stronger County-wide wireless ordinance.

In appreciation,

Jess Lerner, Andy Peri, Roberta Anthes and the 5G Free Marin  
Community  
[5gfreemarin.org](http://5gfreemarin.org)

## **5G Free Marin Ordinance Recommendations, 2-4-19**

Below please find key proposed additions that 5G Free Marin requests be included in the County's wireless policy going forward.

Referenced below are the following attachments, **which will be sent separately in a follow up document:**

Attachment #1: Peter Lacques Recommendations

Attachment #2: Property Value Reduction Information

Attachment #3: Permitting Process and Measurements/Monitoring

Attachment #4: Revised Exceptions Section

Attachment #5: San Anselmo's Purpose and Intent Section

Attachment #6: FCC Letter from US Sen. Blumenthal and Rep. Eshoo

Attachment #7 Burlington, MA Applications for Wireless Installations

### **1) Zoning Allowances and other Prohibitions**

- a) Prohibit installations in residential zoning districts, including public rights of way and easements in residential zones.
- b) Prohibit areas that include childcare, centers, medical facilities and schools, and create and create 1500 foot buffers around these areas.
- c) Consider requiring installation in County Undergrounding Districts where possible.
- d) Prohibit installation on all light and other poles owned by the County.

### **2) Property Values**

- a) Studies show that property values can drop up to 20% when a small cell antenna is nearby, and 94% of home buyers are less interested in properties in cell antenna vicinities (**see Attachment #2, Property Value Reduction Information**).
- b) Include in permit application a requirement for property value assessment of all homes within a 1500 foot radius of proposed antenna site. This would include property value assessment, and potential reduction in value based upon current studies and data of property devaluations.

### 3) Permitting / Public Process

- a) Require wireless facility applicant to notify all residents within 1500 feet of the proposed antenna location via the County's website, postings, and paper mail. Public notice mailings should include information about the notification contents on the **outside of the envelope** such as, "Notice of Nearby Cell Antenna Proposal". Include public hearing information resources.
- b) Require public hearings for all applications and appeals.
- c) Require applicant to provide story pole mock-ups and photoshop graphic to demonstrate actual size and visual impact of equipment.
- d) Require a broader viewshed and aesthetic evaluation of areas where all equipment is to be installed.
- e) Include permitting language from **Attachment #3, Permitting Process and Measurements** (prepared by Frank Leahy, Mill Valley).
- f) Include language for County to select and hire an outside technical expert paid for by applicant to assess and evaluate the application to determine if applicant's technical needs assessment is in fact accurate. This must be done to ensure the outputs are measured accurately and standards are adhered to.

#### 4) Monitoring

- a) We request that the County create a robust signal-monitoring plan using independent contractors chosen by the County, not by the applicant (Verizon/ATT, etc.).
- b) Because of the complex nature of this technology, contractor should be a qualified engineer, having thorough knowledge of current technology, including 5G and other antenna systems.
- c) Include language that requires 24/7 monitoring equipment be installed, of which data can be accessed online. Please do not settle for infrequent monitoring as this does nothing to allow the County to determine cause and effect of signal type and strength associated with health or environmental issues that may arise in the nearby vicinity of antennas and equipment. **See Attachment #3**, which provides more information on monitoring, including the technical aspects of how this is done, and how telecoms can remotely upgrade software without disclosure to towns, cities and counties, etc.

#### 5) ADA

- a) Please add an ADA section and ADA definition that describes a disability as any physical impairment affecting a major life activity, including language from Title II, which requires public agencies to make all their services, programs, and activities ADA accessible.
- b) Include language that indicates that ADA claims can be made if some sort of discrimination (i.e., persons with disabilities are prevented from some activity) can be shown.
- c) The Exceptions Chapter, as well as a Compliance With Laws Chapter, should include the Americans With Disabilities Act,

which is a federal law equal in authority to the Federal Telecommunications Act of 1996.

- d) The ADA is intended to protect disabled people from discrimination and provides general definitions for a disability. The US Access Board and the Department of Labor recognize Electromagnetic Sensitivity (EMS) as a disability.

## 6) Undergrounding

- a) Require undergrounding for cables and accessory equipment in all undergrounding districts.
- b) Consider undergrounding requirements for all wireless equipment, even outside undergrounding districts.
- c) Include undergrounding language in Conditions of Approval section if present in your ordinance.
- d) Include language that references laws that requires cultural resources evaluation should undergrounding be done to prevent disturbance of cultural resources.

## 7) Exceptions Language

- a) Provide strong exceptions language in your ordinance. All of your provisions will be vulnerable to exceptions requests and strong exceptions language is key for a strong ordinance.
- b) Consider incorporating language similar to the combined Fairfax/San Anselmo's exceptions language; It is critical that there be specific criteria for claiming an exception as indicated in **Attachment #4- Combined Fairfax/San Anselmo.**
- c) **Attachment #4** language includes hiring an independent consultant at the applicant's expense. It also includes public input on alternative sites, a public appeals process, and a hearing. The public should be part of the dialogue, consistent with the democratic process.

## **8) Fire Hazard and Other Hazard Potential**

- a) A full fire hazard potential assessment must be conducted that includes the presence of nearby vegetation and structures.
- b) Any and all hazardous material in any equipment proposed to be installed must be disclosed in the permitting application process.
- c) Poles should have seismic and engineering assessments conducted to ensure equipment on poles do not pose a hazard should there be strong winds or earthquakes.
- d) Studies indicate that microwave radiation can cause drying and increased levels of terpenes in plants, dramatically increasing their flammability. Please include this fact in the findings and/or other appropriate section of the ordinance.
- e) Consider fire safety recommendations listed in Attachment #1. This document, prepared for the Fairfax Town Staff by then Mayor Peter Laques, contains a myriad of recommendations that if incorporated, will help minimize fire danger from this technology. (**Attachment #1, Peter Laques Sept. 2018 Council Recommendations.**)

## **9) Light Poles**

- a) Prohibit installations on all of the County-owned Light Poles.

## **10) Establishing setbacks and antenna intervals**

- a) Add into findings or other sections of a County of Marin Ordinance, a statement that references Verizon's own public information, which indicates that 5G antennas transmit signals

that are strong enough to provide 1 GB/sec of data at 3000 feet.

- b) Require a minimum distance for antenna setbacks of 1500 feet from all residents in both residential and commercial zones.

## **11) Endangered/Threatened Species**

- a) Prohibit antenna installations within 1500 feet of all know sites where endangered species are found anywhere in the County of Marin based on data from State of California's Natural Diversity Database or other more detailed County endangered species documents.
- b) The Exceptions Chapter, as well as a Compliance With Laws Chapter, should include language pertaining to the Endangered Species Act. These are federal laws, equal in authority to the Federal Telecommunications Act of 1996. All federal agencies are required to comply with the Endangered Species Act.
- c) The Endangered Species Act is intended to protect animals and plants from extinction, and numerous studies by such institutions as the US Department of the Interior, the NIH, the US Fish and Wildlife Services, and the Department of Entomology at Cornell have indicated that radio frequency radiation is harmful to many different species.

## **12) Trees**

- a) Include language that trees are a valuable resource for the County of Marin and that studies show that cell towers operating in close proximity to trees can harm or kill trees.
- b) Include in the permitting documents compliance with any County of Marin ordinances or policies that protect trees in both the installation and operation of 5G antenna equipment.

- c) Include language that makes telecoms liable for damage to nearby trees.

### **13) Noise Assessment/Evaluation**

- a) Require that installed equipment will generate levels **no greater than 25db** within 10 feet of equipment or at the property line of nearby residences or businesses, which is closer.
- b) Included a requirement for sound containment should levels be found to be higher than 25db for the life of the equipment installed.

### **14) Recertification Requirements**

- a) Include in an ordinance the annual recertification language from the Burlington, Massachusetts's ordinance (**Attachment #7: Burlington, MA Applications for Wireless Installations**).

### **15) Purpose and Intent**

- a) Include in ordinance's Purpose and Intent section language that reflects the values of the County of Marin and the need to uphold those values. San Anselmo's Purpose and Intent section is an excellent example (**Attachment #5, San Anselmo's Purpose and Intent Section**).
- b) Ensure that the section contains language that emphasizes the importance of protecting public health, safety and welfare, preserving aesthetic character and environmental resources, while providing safe, secure telecommunications services.

### **16) Security and Privacy**

- a) Include the County's commitment to data privacy and that all current and new wireless technologies should comply with this commitment.
- b) Include language ensuring that all wireless technologies will provide maximum security for subscribers and non-users alike. This includes security to prevent data breaches, theft and hacking, and proof of such security measures; privacy for users, and guarantees to prevent data collection or use without consent.

**17) FCC Standards Reversal Issue**

- a) Do not incorporate any of the specific FCC standards into a County of Marin ordinance. According to a January 14 release by the law firm BB&K, current and future litigation may reverse these standards and including such FCC standards into ordinance language would bind the County of Marin to such standards, regardless of FCC litigation outcomes.

**18) Appeals**

- a) An appeals process should be incorporated into the County Ordinance, which sets specific requirements for appeal, including a public hearing. The public should have the right to appeal an approval, including any exceptions. This is an important part of the public process and public dialogue. **(Attachment #4- Combined Fairfax/San Anselmo).**