

CAPACITY

If we are to consider Capacity as the reason Verizon is putting this small cell in the location at 184 Creekdale Road, we need to consider what the Telecom Act says about essential services v. non-essential services. Wireless video transmission, i.e. data intensive tasks, equals capacity and are an economic activity that is **not** an essential activity. Therefore, this does not qualify for “preemption” of local authority. Congress specified the difference between essential, and non-essential and none of the wireless pleas for “capacity” is covered in the black letter laws passed by congress; The 1996 Telecom Act; nor the 2012 Spectrum Act.^{1 2}

CALIFORNIA CONSTITUTION

As the California Constitution relays, your primary duty as elected officials (and paid employees) is neither convenience, nor the promise of a future of economic growth, but to promote and preserve the health, welfare and economic viability of all residents, voters and taxpayers.

FCC BULLYING

I know you’re aware of the September 25, 2018 letter to the FCC, written by the Democratic Subcommittee on Energy and Technology, regarding the rights of local governments. This is another point that should be considered when making these decisions. I understand that Contra Costa County felt the need to add comments to this letter. The FCC is bullying all of us since 1996. They continue to streamline new rules taking away local governments the right to govern independently, that are guaranteed by the Federal and California Constitution. I agree with you that we should have these guarantees restored! And we should stop the FCC & TeleCom from bullying us! We are allowing industry to decide policy. That’s allowing the fox to watch over the chicken coop. We have the ability to make decisions here that are win-win!^{3 4} Because you sent comments to the Congressional Committee on Energy and Technology regarding FCC overreach, you’re confirming the issue and you’re now aiding and abetting the FCC by approving these.

AESTHETICS

And lets not forget that you still have discretion when it comes to Section 7901 which has been held up in court, California Court of Appeal, in *T-Mobile West LLC v. City and County of San Francisco*, (2016), which agreed with the defendant’s interpretation that negative aesthetics of the equipment incommodes the public use in that “Beautiful views enhance property values and increase the City’s tax base, the City’s economy, as well as the health and well-being of all who visit, work or live in the City, depends in part on maintaining the City’s beauty.” This applies to our Contra Costa neighborhoods. This interpretation shows that cities still enjoy discretion when determining aesthetics when placing wireless facilities.⁵ I contend that this would include the fact that people see a camouflaged extended pole with 4G antenna, equipment on the ground the size of a refrigerator with a fence that has an attached “WARNING” sign; well, this screams incommode! I mean, who wants a commercial antenna in their neighborhood no matter if it’s disguised as a tree or a svelte tin can? It’s still a commercial application being placed in a neighborhood! Again, incommode!

¹ <https://www.fcc.gov/general/telecommunications-act-1996>

² <https://fas.org/sgp/crs/misc/R43256.pdf>

³ <https://www.cnet.com/news/how-5g-pits-the-fcc-and-carriers-against-local-governments/>

⁴ https://mcnerney.house.gov/sites/mcnerney.house.gov/files/McNerney%20Letter%20to%20Chairman%20Pai_09.25.18.pdf

⁵ <http://emfsafetynetwork.org/wp-content/uploads/2018/04/April-24-2018-Letter-to-EMF-Safety-Network-re-Wireless-c1.pdf>

SECTION 6409(a)

As well, the applicant can omit to mention a part of the equipment that's to be mounted near, or on the pole, either because they're rushed or because they don't want to answer objections. The county is left holding the bag, inspecting each constructed small cell in order to confirm whether the applicant exceeded what they were authorized to install. Don't believe this actually happens? Just ask the residents in Santa Rosa, Ca. ⁶

The drawings provided by Peter Hilliard, On Air, LLC may not be what will actually be placed on this pole.⁷ It has become common for these contractors to show you these elegant drawings, that lack intrusion, noise and blend in, when in fact they will intentionally add equipment not included in the original drawing after the initial installation. And what is the county's recourse? You don't have one. Section 6409(a) has taken every bit of oversight away from local agencies. These small cells differ from any of the permits you have EVER generated. Once the wireless DAS node is attached to the pole, the carriers have right under Section 6409(a) of the Middle-Class Tax Relief and Job Creation Act to expand their equipment. See specifically 6409(g) Substantial Change on the NACO site. ^{8 9} In other words, once a site is built, local governments have little power to restrict further expansions for these small cell antenna equipment if the applicant stays within the limits of 6409(a). Moreover, wireless companies can request to expand an unlimited number of times, so even a small cell that starts off looking small and svelte could be expanded in size immediately without the municipality being able to stop the expansion. And this can happen over and over again. I realize you believe the contractor is being up front, and he might be, but I can assure you, Verizon isn't. ¹⁰

COUNTY ORDINANCE

At this point, you still have the ability to consider another place for this small cell. I personally believe that a commercial zoned area would be the most suitable place for this 4G small cell. I believe that even though this is a "small cell", it still a commercial application. Per County Location Requirements;¹¹

88-24.404. No new height visibility facility or new tower may be established in or within 300 feet of any of the following:

- (a) A single-family residential (R-), two-family residential (D-1), multiple family residential (M-), water recreational (F-1), mobile home/manufactured home park (T-1), or Kensington combining (-K) zoning district.
- (b) A residential lot within a planned unit (P-1) zoning district. (Ord. 2016-11 §2.)

⁶ <http://emfsafetynetwork.org/how-to-oppose-small-cell-5g-towers/>

⁷ <https://www.steelintheair.com/Blog/2017/04/top-10-things-the-wireless-industry-doesnt-tell-you-about-small-cells.html>

⁸ <http://naco.org/sites/default/files/Model-Ord-NACo.pdf>

⁹ <https://www.fcc.gov/general/telecommunications-act-1996>

¹⁰ <https://www.gpo.gov/fdsys/pkg/PLAW-112publ96/pdf/PLAW-112publ96.pdf>

¹¹ <http://www.cccounty.us/DocumentCenter/View/41431/Wireless-Telecommunication-Facilities-Ordinance?bidId=>

88024.204

(p) describes a “low visibility” means any of the following:

This is a weak argument showing that you are forcing an ordinance to work when these small cells didn't even exist when this was written. You would not stick a cell tower in a neighborhood, yet you're willing to place a compact version, with the same capabilities, where it doesn't belong.

Another point to make is that you made no effort to find a better location. Why?

Lastly, these cells are new technology, and the ordinance codes need to be updated to reflect that? Other cities recognize this and have updated their codes.

HINT: just because they are small, doesn't mean they belong in neighborhoods!

FIRE HAZARD

As well, you need to consider the load this will place on the pole. In 2007 three utility poles next to Malibu Canyon Road toppled and ignited a fire. The blaze burned 3,836 acres and destroyed or damaged dozens of structures and vehicles. In 2013 Verizon and SoCal Edison were found guilty and a 60 million dollar settlement was paid out.¹²

A New York Times article dated, November 15, 2018, determined that equipment owned by PG&E, including power lines and poles was responsible for at least 17 of 21 major fires in Northern California last Fall.¹³ The cause of the recent Paradise fire is suspected to have been caused by power lines and a pole as well. This calls into question current building guidelines and ordinances surrounding these poles and the collocation of these poles. With fires becoming so prevalent in California, I believe it would be prudent to take extra precautions before adding extra electrical equipment and weighted loads to these poles. This could be a cause of action.

GENERAL ORDER 95

After that the 2007 Malibu Canyon fire the State of California determined the likely cause was a trio of top heavy electric wire poles had snapped during heavy winds. CPUC's Safety and Enforcement Division filed a petition to modify General Order 95 on May 6, 2016 to enhance CPUC's ability to enforce safety rules.¹⁴ In Santa Rosa, a pole was affixed with a slender small cell fixed to the top of the pole and the pole is already leaning.¹⁵ In the photo (attached) as well as provided in the footnote, you will notice that this pole has a small antenna, similar to the one that is to be placed at 184 Creekdale Road. This shows that even these small antennas can cause leaning issues and potential problems under heavy wind conditions.

I've also added photos of trees that obstruct the wiring of these poles. Two of the trees are Heritage Oaks. These Oak branches are now at the wires and will be a future problem with the wiring. Because General Order 95 requires a clearance around these installations, and I contend that this will create an ongoing problem, and that this could potentially turn into a fire issue. (Attachment A)

¹² <http://articles.latimes.com/2013/may/20/local/la-me-ln-edison-admits-errors-in-malibu-fire-settles-now-top-60-million-20130520>

¹³ <https://www.nytimes.com/interactive/2018/11/29/opinion/sunday/california-wildfires-forest-management.html>

¹⁴ <https://insidetowers.com/cell-tower-news-california-eyes-pole-overloading-safety-issues/>

¹⁵ <http://emfsafetynetwork.org/wp-content/uploads/2018/05/small-cell-tower-junkyard-on-a-pole7.jpg>

As well, you now have been made aware of the potential these poles present for fires and the potential dangers to a neighborhood that sits in a valley that butts up against drought stricken hills, dry grass, trees and other vegetation and is densely populated with homes and families. Because you have been made aware of potential pole loading and electrical equipment loading, this now becomes a liability issue with Contra Costa County in the case that this pole is implicated in yet another California fire.¹⁶ This could be a cause of action.

LIABILITY

Speaking of liability, did you know that the electromagnetic frequencies are not insurable? That means all technology that utilizes these frequencies have been deemed as potentially harmful and Insurance companies, like Lloyds of London, excludes RF's from their insurance policies.¹⁷ By the way, Lloyds of London insures things when others won't. As a matter of fact, Wireless companies have warned shareholders about future financial risk from electromagnetic radiation. As well, a recent article in Willis Views, a real estate and hotel practice periodical, published an article which appeared in March 2013 about the litigation surrounding EMF's and the affect they have on property values and health. They relayed that there are already lawsuits that have been litigated regarding this very thing. As the article points out, "as the science becomes clearer, **the legal defense costs can be staggering!**"

And now, you can't claim ignorance. ¹⁸It's now public record. And here's something else Verizon doesn't want you to know, once you sign off on these, you have taken all responsibility and for all liability, because remember, Verizon, nor their contractors, have any insurance for any harm that may come from these installations. This technology is uninsurable. Again, I'm putting the County on notice. This could be a cause of action. You will be held liable for all harm to human life, property values, and property harm with the approval of these cells.

CPCU 2902

Under the CUCU 2902, local governments still have considerable abilities to regulate these "utilities." *"This chapter shall not be construed to authorize any municipal corporation to surrender to the commission its powers of control to supervise and regulate the relationship between a public utility and the general public in matters affecting the health, convenience, and safety of the general public, including matters such as the use and repair of public streets by any public utility, the location of the poles, wires, mains, or conduits of any public utility, on, under, or above any public streets, and the speed of common carriers operating within the limits of the municipal corporation."*¹⁹

Real Estate Values

The negative aesthetic impact, among other concerns, will decrease the property value of our homes.

a) The National Institute for Science, Law and Public Policy, based in Washington D.C., conducted a survey with 1,000 respondents in the U.S. and abroad, in June 2014, titled "Neighborhood Cell Towers and Antennas: Do they Affect a Property's Desirability?"

¹⁶ <https://www.sacbee.com/news/state/california/fires/article221861975.html>

¹⁷ <https://ehtrust.org/key-issues/cell-phoneswireless/telecom-insurance-companies-warn-liability-risk-go-key-issues/>

¹⁸ https://www.willis.com/Documents/Publications/Industries/Real_Estate/Views_March2012_Facing_Future.pdf

¹⁹ http://www.leginfo.ca.gov/pub/15-16/bill/asm/ab_2901-2950/ab_2902_bill_20160630_amended_sen_v98.pdf

-94% of respondents stated that cell towers and antennas in a neighborhood or on a building would impact their interest in a property and the price they would be willing to pay for it.

-94% stated that a cell tower or antennas attached to an apartment building would decrease their interest in and the price they would be willing to pay for it.

-95% stated that they would opt to buy or rent another property with zero antennas on the building compared to a comparable property with several antennas.

-79% stated that under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower.

-89% were concerned about the increasing number of cell towers and antennas in residential neighborhoods.²⁰

Of note, this was not a self-selected set of people who were skewed towards those who believed their health was at risk. The demographics of the respondents showed that slightly over half (57%) had experienced cognitive effects and 63% had experienced physical effects to RF emissions, while 43% and 37% had never experienced those effects, respectively, yet 94% would pay less for a property near a cell tower or antenna.

b) This survey supported a more robust study performed by Sandy Bond, PhD, of the New Zealand Property Institute, and Past President of the Pacific Rim Real Estate Society (PRRES), published in *The Appraisal Journal* in 2006, [The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods](#)²¹. That study found buyers would pay from 2% to 20% less, for a suburban home with a nearby cell tower. I read this study, and it is well designed, as you will see from my description. The study was a case control study, meaning that for every case with the item to be studied, which would be a suburban neighborhood near a cell tower (within 0.20 mi), a control was provided, which in this study was a neighborhood of comparable socio-economic and demographic characteristics, not near a cell tower (>0.62 mi). A total of 10 communities were studied (5 case communities and 5 control communities). Surveys were performed, and then an actual market analysis of real sales prices on homes was performed, which backed up the survey results. A similar study was performed by Dr. Bond in Florida, and the decrease in housing prices was 2%. Additional facts to communicate the credibility of this work is that *The Appraisal Journal* is the journal of The Appraisal Institute, the largest global professional membership organization for appraisers with 91 chapters.

c) The California Association of Realtors requires that realtors disclose any material facts that affect the value or desirability of the property. One of these is the presence of a cell tower or antenna.

d) A New York Times article of August 27, 2010, titled, *A Pushback Against Cell Towers*, highlighted a decrease in property values in Long Island due to cell tower/antenna installation.²²

The data I've presented includes surveys and pricing studies performed in multiple communities both in the U.S., and abroad. These are all suburban communities of developed countries, like ours. The data showing a decrease in property values of 2%-20% is endorsed by a reputable, international, professional organization of appraisers, such that one of the studies was a featured article in their professional journal, thus educating appraisers globally that this is a fact to be incorporated into their profession. Our own state's association of realtors acknowledges that close proximity of cell towers and antennas decreases property values in its code of professional ethics. Contra Costa County is not exempt from this phenomenon documented in more than one

²⁰ <https://www.businesswire.com/news/home/20140703005726/en/Survey-National-Institute-Science-Law-Public-Policy>

²¹ <http://electromagnetichealth.org/wp-content/uploads/2014/06/TAJSummer05p256-277.pdf>

²² <https://www.nytimes.com/2010/08/29/realestate/29Lizo.html>

community in the U.S., as well as in several communities abroad. Not protecting my constitution right to property protection could be a “cause of action.”

FIBER OPTICS

With that said, if we want to work with Telecom to give them this viable economic edge to bring wireless television to every home across the country, then we should do it on our terms. Why aren't we considering a better alternative to the small cell? Why are we not considering fiber optics? In 2015, engineers reported in *Science* that they'd broken the “capacity limit” for fiber optic transmission, opening the door to future networks that carry more data further at lower costs.²³

Fiber Optic cables installed to every home can provide **1,000 Mbps Internet download/upload speeds for \$40 a month** — for everyone in a city with no data caps, no data throttling and no RF Microwave radiation hazard. **Fiber is by far the fastest, most secure, most reliable and most energy-efficient way to stream Internet and 4k video data** — many thousands of times more energy-efficient than streaming video data Wirelessly through the air, from the curb, as Verizon Wireless, AT&T Mobility and others intend to do. California cities strive to be green cities. Fiber optic, not Wireless, delivers a much, much greener broadband solution.

Underground fiber is the best, but fiber can be strung on Electric Utility Poles — Sonic does it all the time. FTTP (Fiber to the Premises) can leverage the **many miles of fiber optic cable that have already been installed by AT&T California, our Title-II regulated State Telecommunications Utility** — an installation of fiber that California residents already paid for with charges on Wireline AT&T landline phone bills over the last 25 years. **The best solution would be one set of shared Title-II regulated fiber-optic cables to every home**, which would create an even, fair and non-discriminatory playing field on which every Internet Service Provider (including Verizon, AT&T, T-Mobile and Sprint) can compete for your dollars, by offering **Wireline Television/Video services** — a better Wireline television video service than Comcast offers today. That's real competition and a **solution that preserves the residential character of residential neighborhoods.**

It's a No Brainer: California cities can claim ownership over the many miles of fiber optic cable installed with public utility money within the city limits — lines that have been fully-depreciated and ignored by AT&T California. This **smart action by cities can thwart the devious plan that is being aided and abetted by the FCC and the CPUC:** a plan for private Wireless companies to steal this fiber, charge themselves virtually nothing to use it, while charging competitors (like Sonic) very high rates. Cities can stop this fraud and earn revenue to boot. Lots of it. **Municipal Wireline broadband over fiber optic cables is much, much better** than going through the expense, heartache and legal battles it will take to install four competing Wireless broadband networks in our neighborhoods that will require many thousands, if not millions of ugly, hazardous 4G/5G so-called "Small Cell" cell towers in residential zones.

²³ <http://science.sciencemag.org/content/348/6242/1445>

REQUIRED RECERTIFICATION

In Burlington, Massachusetts citizens formed a Small Cells Committee to develop a policy for reviewing small cell applications.²⁴

Their criteria includes an annual recertification of equipment installations, with a fee assessed to the telecommunications vendor to pay for town employee time to oversee the recertification process.

Verizon submitted seven small cell applications and upon learning of the annual recertification requirement and associated fee, the Verizon lawyer indicated his client would like to withdraw the small cell applications as they did not wish to establish a precedent for recertification fees.

I believe the County has the right to request yearly evaluations of these installations and that the County should be in charge of it and should charge a fee to Verizon for the service!

QUESTIONS

1. When these go up and they are drastically changed and since nothing can happen, how are you going to take this into consideration. Are you going to give the standard answer that there's no real proof?
2. The equipment that's on the ground utilizes an enormous amount of energy. How is it going to stay cool? I've been around equipment like this and equipment like this needs a way of keeping it cool.
3. I need to clarify cohabitation. It's my understanding that another carrier can't add to an existing pole that has an existing cell. And does this cohabitation apply to a carrier who wants to add equipment to an existing pole? Could you confirm that for me?
4. Once Verizon is approved in one location, when other carriers move into the existing area, it's my understanding that by allowing this cell, you have set a precedent and that the other carriers will not have to go through the public notification process.
5. If you approve this small cell, it is the beginning of the push for 5G. How are you going to handle that? I'd also like to submit a rendering of what my neighborhood will look like with three carriers placing these small cells every 500 feet.²⁵

²⁴ <http://www.bcattv.org/bnews/top-stories/verizon-drops-small-cell-wireless-booster-application-in-face-of-fees/>

²⁵ <https://www.usatoday.com/story/opinion/2018/03/18/want-5-g-wireless-box-front-your-house-editorials-debates/410824002/>

ATTACHMENT A

Pole at 184 Creekdale Road

