

<u>TITLE:</u>	Amendments to the Larimer County Land Use Code regarding Wireless Communications Facilities Regulations
<u>REQUEST:</u>	To amend the Larimer County Land Use Code to include new wireless communications facilities regulations by (1) replacing and repealing Chapter 16, Commercial Mobile Radio Services (CMRS) of the Land Use Code with new Chapter 16 entitled Wireless Communications Facilities Regulations, (2) making minor amendments to align terms in General Provisions, Section 0.1, Definitions; and (3) making minor amendments to achieve consistency and cross reference the new regulations in Chapter 4, Section 4.5, Special Review and Minor Special Review, Chapter 12, Common Procedures for Development Review, and Chapter 22, Appeals
<u>APPLICANT:</u>	Community Development Department
<u>STAFF CONTACT:</u>	Lesli Ellis, AICP CEP
<u>FILE #:</u>	File #19-CODE0240
<u>PLANNING COMMISSION HEARING:</u>	September 11, 2019
<u>NOTICE GIVEN:</u>	Newspaper publication 14 days prior to hearing in two newspapers of general circulation

---

DISCUSSION:

**Background**

Since earlier this year, the county has been working on revising the existing Commercial Mobile Radio Service (CMRS) Facility Standards in Section 16 of the Land Use Code. The update to the land use regulations, entitled Wireless Communications Facilities (WCFs), will repeal and replace the current chapter and are intended to:

1. Carry forward the original intent of allowing WCFs in the county to meet our growing communication needs while minimizing adverse impacts,
2. Bring local standards into compliance with federal and state requirements (including timing of review and to allow and provide standards for small cell facilities in rights-of-way),
3. Address new technology and its implications for land use, and
4. Improve design and compatibility of such facilities and include notification procedures.

**Public Process**

During this project, staff has conducted prior work sessions to review preliminary concepts and drafts of the standards with:

- The Board of County Commissioners (April 15, 2019),
- The Planning Commission (April 17, 2019),
- Planning Commission and Board of County Commissioners work session (May 8, 2019),
- Planning Commission hearing on the item tabled (June 19, 2019), and

- Planning Commission and Board of County Commissioners work session with consultant, Ken Fellman (August 21, 2019).

Additionally, staff conducted a public open house on May 8, 2019 to gather community feedback and answer questions as well as hosted an online questionnaire from May 8 to May 22, 2109. Approximately 20 people attended the open house and 22 people responded online. Staff shared the input from those events with the boards in previous packets along with additional written correspondence received from community members prior to the June hearing date. The August 14 draft regulations were placed on the project webpage with a comment form to gather feedback. Results from that feedback and other correspondence received can be found in **Attachment C**.

Community Development staff and County attorneys have had assistance from attorneys Gabrielle Daley and Ken Fellman stemming from the county's membership in the nonprofit Colorado Communications and Utility Alliance (CCUA) which provided access to Mr. Fellman for legal advice related to wireless facilities.<sup>1</sup> Consultants reviewed the draft regulations along with written public input and feedback from the work session.

### **Current Legal/Regulatory Framework for the Proposed Regulations**

As noted above, part of the reason for updating the regulations is because they are out of compliance with state and federal requirements, as described below.

In 2014, the Federal Communications Commission (FCC) adopted rules under a 2012 federal statute. The statute and the FCC rules require that any existing wireless facility seeking to be modified, that qualifies as an "eligible facilities request" **must** get regulatory approval from the County, and if the County does not approve the application within 60 days it is "deemed granted" by federal law. The FCC rules adopt multiple definitions of key terms related to wireless facilities, and the draft code amendments incorporate these new definitions and rules.

In 2018, Colorado HB 17-1193, the "Small Cell Law" made small cell facilities a use by right, subject to local police powers, and it applies the state "shot clock" for wireless facilities, which for some WCFs allows for more review time than the federal shot clock standards.

Additionally, in September 2018, the Federal Communications Commission (FCC) issued a small cell order which is being appealed in federal court. Hundreds of local governments nationally are parties to the appeal, including the CCUA, of which the county is a member. There are some conflicts between the FCC rule and state law, including the shot clock provisions, definitions for small cell facilities, fees that can be charged, and the scope of local police power as discussed on August 21.

The work session also included information about the legal framework related to wireless radio frequency (RF) emissions and health. The longstanding 1996 Telecommunications Act, 47 USC 332(c)(7)(b)(iv) restricts any state or local regulation of wireless facilities based on environmental (including health) effects of radio frequency emission, preempting local authority. The Federal Communications Commission (FCC) has sole federal authority to set health emission standards, and case law has supported the preemption. Locally, cities and counties can require telecommunication operators to certify that sites will comply with FCC standards which is included in the proposed regulations.

---

<sup>1</sup> CCUA is a government trade association that represents and advocates for its member municipalities, counties, school districts and regional entities in a wide variety of telecom, cable, broadband and utility issues. It works closely with CCI and CML and is funded by member dues and an annual conference. CCUA is also the Colorado chapter of the National Association of Telecommunications Officers and Advisors (NATOA).

Some follow up comments noted interest in addressing signage on facilities for people with electro hypersensitivity to address the Americans with Disabilities Act (ADA). The proposed regulations require telecommunication providers to apply with all applicable state and federal laws (in section 16.1.3), now specifically noting ADA requirements. In addition, outside of the regulations, the county can commit to maintaining a database and map of small cell facility locations.

## **Overview of Proposed Regulations**

The proposed regulations are in **Attachment A**, and staff has made modifications since the June and August drafts, initially to provide better organization and clarity and in this draft to address comments discussed at the work session and received through August 28, 2019. **Attachment B** contains a summary of what changed since the August 14 draft.

### Standards

The proposed standards address priority for collocating facilities, include compatibility and concealing standards, and address a number of issues for towers and alternative tower structures such as height, setbacks, new camouflage/concealment language to achieve design in context with surroundings, as well as addressing lighting, noise and landscaping. **Table 16.A**, on the next page, identifies the zoning districts where WCFs are allowed and their height limits. Generally, taller facilities are allowed in business, commercial, and industrial districts and the O open district. More concealed facilities are encouraged in the estate, residential, farming, and forestry districts. Because of proximity to denser residential areas, Growth Management Areas have heightened standards and procedures, such as encouraging concealed towers, including greater landscaping and screening requirements, and including a referral as part of the review to the respective city or town.

Additionally, the proposed standards now provide guidance on small cell facilities in the right-of-way, which the current standards do not address.

**Table 16.A: Zoning Districts Where WCFs are Allowed and Heights**

<b>ZONING DISTRICT</b>	<b>Attached Facility on Existing Structure</b>	<b>Small Cell Facility</b>	<b>Alternative Tower Structure (concealed)</b>	<b>Tower (non-concealed)</b>
E and E-1 Estate RE and RE-1 Rural Estate R, R-1, and R-2 Residential M and M-1 Multiple Family	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 60 feet high	Not permitted
FA and FA-1 Farming FO and FO-1 Forestry	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 60 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 80 feet high
A Accommodations T Tourist	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 60 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 80 feet high
B Business RFLB Red Feather Lakes Business	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 80 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 100 feet high
C – Commercial I – Industrial I-1 – Heavy Industrial PD – Planned Development	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 80 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 120 feet high
O-Open	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>MS</b> ≤ 100 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 120 feet high <b>SR</b> ≤ 160 feet high
AP – Airport	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high	<b>PSP</b> ≤ 40 feet high
Public right-of-way	Master License Agreement (MLA) & right-of-way permit	MLA & right-of-way permit	Not permitted	Not permitted
<b>KEY:</b> (See Table 16.B for procedures) SP = Site Plan PSP = Public Site Plan MS = Minor Special Review SR = Special Review				

### Proposed Review Procedures

The review procedures are summarized in **Table 16.B**. The procedures expand upon existing notification and referral requirements, so all WCFs will involve some form of notification. Notifying neighbors within 500-feet of a property application is the standard practice with county development review; however, on a case-by-case basis that radius may be expanded to 1,000 feet or more, for instance when 500-feet would dissect a neighborhood or subdivision.

### Shot Clock Requirements and Eligible Facilities

The proposed regulations address state legislation pertaining to timely review of wireless facilities, which is referred to as the “shot clock.” Shot clock requirements for final action on complete applications are as follows:

- **150 days** for new structures.
- **90 days** for collocated wireless communication facilities that do not qualify as an eligible facilities request and small cell facilities (collocated or new).
- **60 days** for eligible facilities requests.

Provisions for “tolling the shot clock” (i.e., pausing or stopping the review) for incomplete applications are included. These review time frames have been set by the state statute. The county may stop the clock for incomplete or insufficient information if it provides notice of the deficiency to the applicant early in the process. The proposed regulations also incorporate the 2014 FCC regulations that require

“eligible facilities requests” for modifications on existing wireless sites to be processed even more quickly, in this case through a building permit only process. The proposed regulations will give the county staff the information necessary at the time of application to quickly determine whether an application qualifies as an eligible facilities request, which, per federal law, must be approved.

**Table 16.B – Review Procedures and Requirements for Different Facility Types**

Procedure	Applies to	Notice Given	Referral	Type of Decision	Appeal to	Time-frame
<b>Building permit only</b>	• Eligible facilities requests	• n/a	• n/a	Administrative decision	Board of Appeals	60 days
<b>Site Plan (SP)*– Sec. 6.0 and 6.1 of Code</b>	• See Table 16 A for zoning districts and WCF types	• Notice of administrative decision sent to abutting property owners following administrative decision	• Sent to referral agencies within 14 days • Notice sent to cities if in a GMA	Administrative decision	BCC	90 days
<b>Public Site Plan (PSP)*– Sec. 6.2 of Code</b>	• See Table 16 A for zoning districts and WCF types	• Notice sent to neighboring properties within 500 feet of the property	• Sent to referral agencies within 14 days • Notice sent to cities if in a GMA	Administrative decision. If 30% of the neighbors note concerns, it may be reviewed by Board of County Commissioners (BCC).	BCC	90 days or 120 if BCC review
<b>Minor Special Review (MS)*– Sec. 4.5 of Code</b>	• See Table 16 A for zoning districts and WCF types	• Notice sent to neighboring properties within 500 feet of the property	• Sent to referral agencies within 14 days • Notice sent to cities if in a GMA	BCC approval including a public hearing		120 days
<b>Special Review (SR)* – Sec. 4.5 of Code</b>	• See Table 16 A for zoning districts and WCF types	• Notice sent to neighboring properties within 500 feet of the property	• Sent to referral agencies within 14 days • Notice sent to cities if in a GMA	Two public hearings: Planning Commission (PC) recommendation and BCC approval		150 days
<b>Master License Agreement (MLA) with right-of-way permit</b>	• Small cell facilities in right-of-way	• Notice sent to neighboring properties within 500 feet of each proposed facility proposed in supplemental site license	• Sent to referral agencies within 14 days of the supplemental site license submittal	Administrative right-of-way permit		90 days

\* Building permit required in addition to the planning approval.

#### Master License Agreement (MLA)

The 2017 state statute requires local governments to permit small cell facilities in public rights-of-way. This use is subject to local police power, so each company will need specific authorization for these installations. It is proposed that the county follow the process used by many other local governments in Colorado, which is to grant a master license agreement (MLA), which generally authorizes the use of the rights-of-way, and contains provisions that the county will want to cover every individual site.

A Sample Master License Agreement (MLA) was included with the August 21 work session materials. The Planning Commission does not need to make a recommendation on the MLA but may offer suggestions. The draft MLA, Particularly Exhibit B, Operational and Design Criteria, will be further updated following revisions to proposed Chapter 16. An excerpt for new language regarding siting preferences to be included in Section 5 of Exhibit B is shown in **Attachment D**.

The draft MLA addresses topics such as insurance, indemnification, compliance with local laws, relocation obligations. A Supplemental Site License in Exhibit A demonstrates the form to be used when a company applies for a specific site or batch of sites. These site licenses will include drawings and related information ensuring compatibility with the county's design standards. Each specific location would still be individually evaluated and given a right-of-way permit and will go through a modified version of the county's development review process with the county engineer involved in reviewing and approving the right-of-way permit. To date, no telecommunication providers have entered an agreement with the county using such template.

#### Fees

Staff will present an updated fee schedule at the Board of County Commissioners hearing for each of the process types identified in the regulations.

#### REVIEW CRITERIA:

There are two review criteria for amendments to the text of the Land Use Code, in this case Chapter 16:

1. ***The proposed changes are consistent with the Master Plan and the intent and purpose of the County's Master Plan.*** It is the overall intent of the County's Comprehensive Plan that adequate public facilities be provided with all applications. The updated FCC and State of Colorado requirements are based on a policy decision to promote deployment of Wireless Communication Facilities due to the explosion of network demand and the dramatic increase in the number of devices that need wireless access to function. In addition, the proposed regulations include aesthetic, spacing, height, and other criteria for small cell facilities placed in the right-of-way to allow for unimpeded use of the right-of-way, while respecting the need for additional coverage area for small cell facilities.
2. ***The proposed changes are necessary to correct an omission or error in the Land Use Code.*** The County's current wireless regulations, Commercial Mobile Radio Service regulations, are not consistent with the more recent changes by the FCC and State of Colorado. These updated regulations provide current terminology, updated technology, and provisions for use of the right-of-way.

---

#### STAFF FINDINGS:

1. The proposed Wireless Communications Facilities regulation text changes are consistent with the Master Plan (and newly adopted County Comprehensive Plan) and the intent and purpose of the Land Use Code.
2. The proposed changes are necessary to correct an omission or error in the Land Use Code.

#### STAFF RECOMMENDATION:

Community Development staff recommends that the Larimer County Planning Commission recommend approval of the Land Use Code amendments regarding Wireless Communications Facilities by:

- 1) Replacing and Repealing the regulations in Chapter 16, Commercial Mobile Radio Services (CMRS) with new Chapter 16, Wireless Communications Facilities;
  - 2) Making minor amendments to achieve consistency with new Chapter 16 but amending Section 0.1. – Definitions to remove and replace terms that are newly defined in Chapter 16 (i.e., Antenna, Collocation, Microcell) and to remove definitions that are no longer used (i.e., Antenna, attached, Antenna, concealed, Antenna, setback, Antenna, tower, Antenna tower height, Commercial mobile radio service (CMRS), Facility, CMRS, Facility, CMRS temporary, Radio and television transmission).
  - 3) Making minor amendments to Chapter 4, Section 4.5, Special Review and Minor Special Review, Chapter 12, Common Procedures for Development Review, and Chapter 22, Appeals to cross reference and achieve consistency with the new standards in Chapter 16.
- 

### SUGGESTED MOTION:

The Planning Staff recommends that the Larimer County Planning Commission recommend to the Board of County Commissioners approval of the proposed amendments, file #19-CODE0240, to repeal and replace Section 16 of the Larimer County Land Use Code, as follows in **Attachment A**.

### ATTACHMENTS:

- Attachment A: Proposed Land Use Code and Chapter 16 – Wireless Communication Facility Regulations
- Attachment B: Summary of Changes Since Aug. 14, 2019 draft
- Attachment C: Notes and feedback from Wireless Communications Facilities Work Session, and related community feedback, including Survey Monkey question results
- Attachment D: Draft Master License Agreement, excerpt with proposed siting criteria

**Attachment A**

## **16.0 Wireless Communications Facilities**

**16.1.1 - Intent and Purpose.** It is the intent and purpose of this chapter of the county's Land Use Code to establish a regulatory framework for Wireless Communications Facilities (WCFs) constructed or located within Larimer County that accommodates the communication needs of residents and businesses, protects the public, health, safety, and general welfare of the community, and minimizes adverse impacts.

A. **Purpose.** The county finds that these regulations are necessary to:

1. Provide for the managed development, installation, maintenance, modification, and removal of wireless communications infrastructure in the county with the fewest number of WCFs to complete a network without unreasonably discriminating against wireless communications providers of functionally equivalent services, including all of those who install, maintain, operate, and remove WCFs;
2. Promote and protect the public health, safety, and welfare by reducing the visibility of WCFs to the fullest extent possible through techniques including but not limited to camouflage design techniques and undergrounding of the equipment associated with WCFs where technically feasible;
3. Encourage the deployment of smaller, less intrusive WCFs to supplement existing larger WCFs;
4. Encourage the use of wall-mounted panel antennas;
5. Encourage roof-mounted antennas only when wall-mounted antennas will not provide adequate service or are not otherwise feasible;
6. Encourage the location of WCFs in non-residential areas in a manner that minimizes the total number of WCFs needed throughout the community;
7. Encourage the collocation of WCFs on new and existing sites;
8. Encourage owners and users of WCFs to locate them, to the extent possible, in areas where the adverse impact to the community is minimized;
9. Enhance the ability of wireless communications service providers to provide such services to the community quickly, effectively, and efficiently; and
10. Effectively manage small cell facilities in the right-of-way.

B. **Applicability.**

1. The requirements set forth in this chapter shall apply to all WCF applications for base stations, alternative tower structures, towers, micro cells, and small cell facilities as defined in this chapter.
2. This chapter shall not preempt underlying zoning regulations unless explicitly stated in this chapter or as explicitly stated in federal and/or state law.
3. The requirements set forth in this chapter shall not apply to:
  - a. Amateur radio antenna, over-the-air receiving device (OTARD), as those devices are defined in applicable law as of the date of these provisions, and residential television reception/antenna towers, except as provided in Section 16.1.1.B.3.c below.
  - b. Pre-existing WCFs. Any WCF for which a permit has been properly issued prior to the effective date of these new wireless regulations, shall not be required to meet the requirements of this chapter of the Code, other than the requirements of the operational standards section. Changes and additions to pre-existing WCFs (including trading out of antennas for an equal number of antennas) shall meet applicable requirements of the operational standards Section. Notwithstanding the foregoing, any modifications qualifying as an eligible facilities request shall be evaluated under this Code.
  - c. Miscellaneous antennas. Antennas used for reception of television, multi-channel video programming and radio such as OTARD antennas, television



broadcast band antennas, and broadcast radio antennas, provided that any requirements related to accessory uses contained in this Code and the requirement that the height be no more than the distance from the base of the structure where it meets the ground to the property line are met. The director has the authority to approve modifications to the height restriction related to OTARD antennas and OTARD antenna structures, if in the reasonable discretion of the county, modifications are necessary to comply with federal law.

- d. A WCF installed upon the declaration of a state of emergency by the federal, state, or local government, or a written determination of public necessity by the county.
- e. A temporary WCF installed for providing coverage of a special event such as a news coverage or sporting event, must be included in the special event permit application.

**C. Permit Required.**

- 1. No person, firm or corporation shall construct, establish, build or cause to be constructed, established or built a WCF without first having obtained land use approvals as required in this chapter, a lease (as applicable), pole attachment agreement or license (as applicable), and a building permit or right-of-way permit for this purpose.
- 2. All WCF permits shall expire and be of no further force and effect 180 days following the date of county approval unless, pursuant to the discretion of the director, prior to the date of expiration: (1) Construction has been diligently pursued towards completion of the project, or (2) Approval has been extended in accordance with Subsection 3 below.
- 3. Prior to the expiration of a WCF permit, one (1) 180-day extension of the permit may be authorized by the director upon a written request by the applicant. An extension may be granted if a review of the permit shows that no major changes in the county's development or zoning regulations or in the development pattern of the surrounding properties has occurred, as determined by the director. If a WCF permit expires, no further development of the facility may occur until a new permit application is submitted, reviewed and approved in accordance with this Code, subject to all application and processing fees.

- D. Severability.** If any section, clause, provision, or portion of these regulations should be found to be unconstitutional or otherwise invalid by a court of competent jurisdiction, or by federal or state statute or regulation, the remainder of the regulations in this chapter shall not be affected thereby and is hereby declared to be necessary for the public health, safety, and welfare.

**16.1.2 - Where Allowed.**

Subject to the standards of this Section, the WCF classifications that are permitted in each zoning district are set out in Table 16.A below. See Section 16.1.6 – Review Procedures and Table 16.B for review processes. WCFs located in the right-of-way are permitted through a master license agreement and right-of-way permit, subject to the design standards set forth in Section 16.1.4, WCF in the right-of-way.

**Table 16.A: Zoning Districts Where WCFs are Allowed and Heights**

<b>ZONING DISTRICT</b>	<b>Attached Facility on Existing Structure</b>	<b>Small Cell Facility</b>	<b>Alternative Tower Structure (concealed)</b>	<b>Tower (non-concealed)</b>
E and E-1 Estate RE and RE-1 Rural Estate R, R-1, and R-2 Residential M and M-1 Multiple Family	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 60 feet high	Not permitted
FA and FA-1 Farming FO and FO-1 Forestry	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 60 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 80 feet high
A Accommodations T Tourist	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 60 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 80 feet high
B Business RFLB Red Feather Lakes Business	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 80 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 100 feet high
C – Commercial I – Industrial I-1 – Heavy Industrial PD – Planned Development	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>PSP</b> ≤ 80 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 120 feet high
O-Open	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high <b>MS</b> ≤ 100 feet high	<b>PSP</b> ≤ 60 feet high <b>MS</b> ≤ 120 feet high <b>SR</b> ≤ 160 feet high
AP – Airport	<b>SP</b>	<b>SP</b> ≤ 40 feet high	<b>SP</b> ≤ 40 feet high	<b>PSP</b> ≤ 40 feet high
Public right-of-way	Master License Agreement (MLA) & right-of-way permit	MLA & right-of-way permit	Not permitted	Not permitted
<b>KEY: (See Table 16.B for procedures)</b> <b>SP</b> = Site Plan <b>PSP</b> = Public Site Plan <b>MS</b> = Minor Special Review <b>SR</b> = Special Review				

**16.1.3 - Operational Standards for All WCFs.**

- A. **Federal and State Requirements.** All WCFs shall meet the current standards and regulations of the Federal Aviation Administration (FAA), the Federal Communications Commission (FCC) and any other agency of the federal or state government with the authority to regulate WCFs. If such standards and regulations are changed, then the owners of the WCF shall bring such facility into compliance with such revised standards and regulations within the time period mandated by the controlling federal or state agency. All applicants are responsible to ensure that they comply with federal and state regulations, including, but not limited to Americans with Disabilities Act (ADA) and other regulatory requirements.
- B. **Permission to Use Right-of-Way.** For WCFs in the right-of-way, the applicant shall execute a license agreement with the county. In this, the county is able to grant a non-exclusive license to the applicant to use the right-of-way. Attachment of WCFs on an existing traffic signal, street

light pole, or similar structure shall require written evidence of a license, or other legal right or approval, to use such structure by its owner.

- C. **Operation and Maintenance.** To ensure the structural integrity of WCFs, the owner of a WCF shall ensure that it is maintained in compliance with the standards contained in applicable local building and safety codes in effect at the time of original installation or modification. If upon inspection at any time, the county concludes that a WCF fails to comply with such codes and constitutes a danger to persons or property, then, upon written notice being provided to the owner of the WCF, the owner shall have 30 days from the date of notice to bring such WCF into compliance. Upon good cause shown by the owner, the county's chief building official may extend such compliance period not to exceed 90 days from the date of said notice. If the owner fails to bring such WCF into compliance within said time period, the county may remove such WCF at the owner's expense.
- D. **Abandonment and Removal.** If a WCF has not been in use for a period of six (6) months, the owner of the WCF shall notify the county of the non-use and shall indicate whether re-use is expected within the ensuing three months. Any WCF that is not operated for a continuous period of six months shall be considered abandoned. The county, in its sole discretion, may require an abandoned WCF to be removed. The owner of such WCF shall remove the same within sixty (60) days of receipt of written notice from the county. If such WCF is not removed within said sixty (60) days, the county may remove it at the owner's expense and any approved permits for the WCF shall be deemed to have expired. Additionally, the county, may not approve a new WCF application until the applicant who is also the owner or operator of any such abandoned WCF has removed such WCF or payment for such removal has been made to the county. Notwithstanding the foregoing, nothing in this subsection shall limit an applicant for applying for an eligible facilities request on an existing eligible support structure.
- E. **Hazardous Materials.** No hazardous materials shall be permitted in association with WCFs, except those necessary for the operations of the WCF and only in accordance with all applicable laws governing such materials.
- F. **Collocation.** No WCF owner or operator shall unreasonably exclude a telecommunications competitor from using the same facility or location. Upon request by the director, the owner or operator shall provide evidence explaining why collocation is not possible at a particular facility or site.

#### 16.1.4 - Design Standards.

- A. **Minimum Setbacks for all Towers from Property Lines.** The minimum setback from property lines for towers not located in the right-of-way shall be as follows:
- a. Adjacent to properties, buildings, or structures with residential uses, a 2:1 setback to tower height applies (setback = 200% of the tower height);
  - b. Adjacent to any right-of-way a 1:1 setback to tower height applies (setback = 100% of the tower height);
  - c. For all other property adjacencies, the setback shall be at least 30% of tower height. *(Note: Could delete this if the Planning Commission thinks it might not be suitable in commercial districts. Keeping the language may encourage collocations on commercial buildings rather than towers.)*
2. An alternative setback, approved by the director or board of county commissioners, for an alternative tower structure where the facility replaces or proposes an accessory

structure to an established principal use, to include, but not limited to, signs, light poles, and flagpoles, where it is evidenced that the siting and location of the alternative tower structure allows for camouflage and concealment design techniques to a greater extent than would be achieved by application of the principal structure setback.

3. All ground-based equipment shall meet the building and structure setbacks in the zoning district, unless an alternative setback is established for an alternative tower structure pursuant to this section.

B. **Design Standards for all WCFs.** The following design and landscaping standards apply to all WCFs governed by this chapter provided, however, that the director may waive any of these requirements if they determine that the goals of this section are better served thereby. To that end, WCFs shall be designed and located to minimize the impact on the surrounding area and to maintain the character and appearance of the county, consistent with other provisions of this Code.

1. **Camouflage, Concealment, or Camouflage Design Techniques.** All WCFs and any transmission equipment shall, to the extent technically feasible, use camouflage design techniques and not be readily apparent. Techniques may include, but not limited to the use of materials, colors, textures, screening, undergrounding, or other design options that will blend the WCF to the surrounding natural setting and/or built environment. Design, materials and colors of WCFs shall be compatible with the surrounding environment. Designs shall be compatible with structures and vegetation on sites located in the right-of-way and on adjacent parcels.
  - a. Camouflage design may be of heightened importance where findings of particular sensitivity are made (e.g., proximity to historic or aesthetically significant structures and/or natural or community features, or in a Growth Management Area). Should the director determine that WCFs are located in areas of high visibility, they shall (where possible) be designed (including but not limited to camouflaged, placed underground, depressed, or located behind earth berms) to minimize their profile at the request of the director.
  - b. The camouflage design may include the use of alternative tower structures should the director determine that such design meets the intent of this section and the community is better served thereby.
  - c. All WCFs, shall be constructed out of or finished with non-reflective materials (visible exterior surfaces only).
  - d. Maximum height for WCFs shall be based on limits set forth in Table 16.A above, except if they are structures, they shall comply with building height limits (e.g., for a silo).
2. **Collocation.** WCFs shall be designed and constructed to permit the facility to accommodate WCFs from at least two (2) wireless service providers on the same WCF unless the county approves an alternative design to the extent reasonably feasible based upon construction, engineering and design standards. Collocation shall not be required when it would materially compromise the camouflage design intent of the WCF. Upon request by the director, the owner or operator shall provide evidence explaining why collocation is not possible at a particular facility or site.
3. **Lighting.** WCFs shall not be artificially lighted, unless required by the FAA or other applicable governmental authority, or the WCF is mounted on a light pole or other similar structure primarily used for lighting purposes. If lighting is required, the county may review the available lighting alternatives and approve the design that would cause the least disturbance to the surrounding views. Lighting shall be shielded or directed to the

- greatest extent possible to minimize the amount of glare and light falling onto nearby properties, particularly residences.
4. **Noise.** Noise generated on the site must not exceed the levels permitted by the county noise ordinance, except that a WCF owner or operator shall be permitted to exceed noise standards for a reasonable period of time during repairs, not to exceed two hours without prior authorization from the county.
  5. **Landscaping and Fencing Requirements.**
    - a. WCFs shall be sited in a manner that does not reduce landscaping required by the Land Use Code for the other principal uses on the property.
    - b. Existing mature tree growth and natural landforms on the site shall be preserved to the maximum extent possible. In some cases, such as WCFs sited on large lots with an abundance of vegetation, including trees, natural growth around the site perimeter may be sufficient to buffer.
    - c. No trees larger than 4 inches in diameter measured at 4 ½ feet high on the tree may be removed, unless authorized by the director. To obtain such authorization the applicant shall show that tree removal is necessary, the applicant's plan minimizes the number of trees to be removed, and any trees removed are replaced at a ratio of 2 to 1. The county shall designate a tree caliper requirement for all replacement trees. Additional landscaping required by the county will be maintained at the expense of the owner of the WCF.
    - d. Landscaping for concealed towers shall be compatible with the type of camouflage or concealment technique.
    - e. In Growth Management Areas (GMAs), excluding small cell facilities deployed in the right-of-way, all ground-based equipment must be screened by a solid fence or screen wall six (6) feet in height as measured in accordance with this Code, and surrounded by a thirty (30) percent opaque county landscape buffer around the perimeter of the enclosed area. Such area shall include a 60:40 mix of evergreen and deciduous trees. This requirement may be reduced or waived by the director in areas where the buildings or other structures provide a comparable or better screening effect. Existing landscaping within ten (10) feet of the perimeter of the enclosed area may be applied towards the minimum planting requirements, upon approval of the director. The planting area must be adequate to allow for appropriate spacing for mature growth for the tree species. In no case shall the planting area be less than fifteen (15) feet from the edge of the solid fence or screen wall. Where fencing for screening is required by the director the fencing or screening material shall meet the standard of the zone district in which the WCF will be located. In no case may fencing material primarily be wire or metal.
  6. **Fire protection.** WCFs shall be sited and built to address International Fire Code standards for fire-detection and extinguishing systems, and if in a wildfire hazard area provide defensible space and adequate vehicle access for emergency equipment and possibly an approved water supply.
  7. **Adjacent to Residential Uses.** WCFs shall be sited in a manner that evaluates the proximity of the facility to residential structures. When placed near a residential property, the WCF shall be placed adjacent to the common side yard property line between adjoining residential properties, such that the WCF minimizes visual impacts equitably among adjacent properties. In the case of a corner lot, the WCF may be placed adjacent to the common side yard property line between adjoining residential properties, or on the corner formed by two intersecting streets. If these requirements are not reasonably feasible from a construction, engineering or design perspective, the applicant

may submit a written statement to the director requesting the WCF be exempt from these requirements.

8. **Residential Buildings.** WCFs shall not be placed on buildings used principally for residential purposes.

C. **Design Standards Specific to WCF Types.** The design requirements set forth in this section shall apply to the types of WCFs as specified below.

1. **Design Standards for Facilities Attached to Base Stations.**

- a. Roof mounted WCFs, including the antenna, support structures and screening, shall not project more than ten (10) feet above the roof line of a building.
- b. WCFs shall be painted to match the building and shall be architecturally integrated with the building materials.
- c. If placed on a structure or building which is non-conforming due to setbacks or height, the addition of antennas or equipment must not increase the non-conformity.
- d. Façade mounted WCFs, including the antenna, support structures and screening, shall not extend above the top of the structure or the parapet wall, or, in the case of a pitched roof, above the fascia.
- e. Base station mounted WCFs that are not small cell facilities shall not be placed on buildings with residential uses.
- f. WCFs attached to base stations shall utilize camouflage design techniques. If an antenna is installed on a structure other than a tower or alternative tower structure, such as a base station (including, but not limited to the antennas and accessory equipment) it shall be of a neutral, non-reflective color that is identical to, or closely compatible with, the color of the supporting structure, or uses other camouflage/concealment design techniques so as to make the antenna and related facilities as visually unobtrusive as technically feasible. Additionally, any ground-mounted equipment shall be located in a flush-to-grade underground equipment vault, unless otherwise authorized by the director.

2. **Design Standards for Alternative Tower Structures Not in the Right-of-Way.**

- a. Alternative tower structures not in the right-of-way shall;
  - i. Be designed and constructed to look like a building, facility, structure, or trees typically found in the area or other natural feature.
  - ii. Be camouflaged/concealed consistent with other existing natural or manmade features in or near the location where the alternative tower structure will be located.
  - iii. Be architecturally compatible with the surrounding area.
  - iv. Be the maximum size needed to obtain coverage objectives while maintaining compatibility with the context and character of the surrounding area. Height or size of the proposed alternative tower structure should be minimized as much as possible.
  - v. Be sited in a manner that evaluates the proximity of the facility to residential structures and residential district boundaries.
  - vi. Take into consideration the uses on adjacent and nearby properties and the compatibility of the facility to these uses.
  - vii. Be compatible with the surrounding topography and landscape.

3. **Design Standards for Towers.**

- a. Monopoles which taper from the base to the tip are preferred over lattice and guy towers with support.

- b. Towers shall be subject to any applicable FAA standards and county design approval processes.
  - c. Tower structures should use existing landforms, vegetation, and structures to aid in screening the facility from view or blending in with the surrounding built and natural environment.
  - d. All towers shall be enclosed by security fencing or wall and shall also be equipped with an appropriate anti-climbing device.
  - e. Towers shall be compatible with the surrounding tree coverage and foliage.
4. **Design Standards for Accessory Equipment and Transmission Equipment.** Accessory equipment and transmission equipment for all WCFs shall meet the following requirements:
- a. All transmission equipment and accessory equipment shall be grouped as closely as technically possible.
  - b. Transmission equipment and accessory equipment shall be located out of sight whenever possible by locating within equipment enclosures. Where such alternate locations are not available, the transmission equipment and accessory equipment shall be camouflaged or concealed in a manner appropriate to the character of the site.
  - c. Transmission equipment and accessory equipment shall be of a neutral, non-reflective color that is identical to, or closely compatible with, the color of the supporting structure or uses other camouflage/concealment design techniques so as to make the equipment as visually unobtrusive as possible, including, for example, painting the equipment to match the structure.
  - d. Equipment enclosures shall be designed to be architecturally compatible. (See 16.1.4.C.2.a.)
5. **Design Standards for Small Cell Facilities in the Right-of-Way.** Small cell facilities in the right-of-way shall be designed and constructed to look like a facility or utility pole typically found in the right-of-way and shall comply with the following design standards.
- a. Collocations are preferred, and the number of poles within the right-of-way shall be limited as much as possible.
  - b. The master license agreement notes preferred locations for siting facilities on streets, support structures, and their general placement.
  - c. New facilities placed on new wooden poles is prohibited, unless authorized through the master license agreement.
  - d. **Appearance.**
    - i. With respect to a pole-mounted small cell facility, be located on, or within, an existing utility pole serving another utility;
    - ii. Be camouflaged/concealed consistent with other existing natural or manmade features near the location where the facility will be located;
    - iii. With respect to a pole-mounted small cell facility, be located on, or within, a new utility pole where other utility distribution lines are aerial, if there are no reasonable alternatives, and the applicant is authorized to construct the new utility poles;
    - iv. To the extent reasonably feasible, be consistent with the size and shape of the pole-mounted equipment installed by communications companies on utility poles near the facility;
    - v. Be sized to minimize the negative aesthetic impacts to the right-of-way and adjacent property;

- vi. Be designed such that antenna installations on traffic signal standards are placed in a manner so that the size, appearance, and function of the signal will not be materially altered, as determined by the county in its sole discretion;
- e. **Ground Mounted Equipment.** Be designed such that any ground mounted equipment shall be located in a manner necessary to address both public safety and aesthetic concerns in the reasonable discretion of the director, and may, where appropriate and reasonably feasible based upon technical, construction, and engineering requirements, require a flush-to-grade underground equipment vault. Ground-based equipment may be located within the rights-of-way on a case-by-case basis, accounting for impacts of such equipment within the right-of-way on the public health, safety, and welfare
- f. **Non-Interference.**
  - i. The alternative tower structure shall comply with the Americans with Disabilities Act (ADA) and every other local, state, and federal law and regulations
  - ii. The alternative tower structure shall not alter vehicular circulation or parking within the right-of-way or impede vehicular, bicycle, or pedestrian access or visibility along the right-of-way.
  - iii. No alternative tower structure may be located or maintained in a manner that causes unreasonable interference. Unreasonable interference means any use of the right-of-way that disrupts or interferes with its use by the county, the general public, or other person authorized to use or be present upon the right-of-way, when there exists an alternative that would result in less disruption or interference. Unreasonable interference includes any use of the right-of-way that disrupts vehicular or pedestrian traffic, any interference with public utilities, and any other activity that will present a hazard to public health, safety, or welfare;
- g. **Heights.**
  - i. The small cell facility shall not be more than ten feet higher (as measured from the ground to the top of the pole) than any existing utility or traffic signal within 600 feet of the pole or structure.
  - ii. Any such facility shall in no case be higher than forty (40) feet, unless such pole is already existing at a greater height.
  - iii. Any transmission equipment placed on an existing tower shall not extend more than five (5) feet above such pole. Small cell facilities attached to an electric distribution alternative tower structure may be located at the minimum height necessary to provide the safety clearance required by the electric utility if applicable.
- h. **Spacing.**
  - i. No new freestanding small cell facility shall be within 600 feet of another freestanding small cell facility in the right-of-way. These separation requirements do not apply to attachments made to existing alternative tower structures.
  - ii. The director may exempt an applicant from these separation requirements if (1) the applicant demonstrates through technical network documentation that the minimum separation requirement cannot be satisfied for technical reasons, or (2) the director determines, when considering the surrounding topography; the nature of adjacent uses and nearby properties; and, the height of existing structures in the vicinity, that



placement of a WCF at a distance less than 600 feet from another small cell facility will meet the intent of reducing visibility and visual clutter of small cell facilities to the extent possible.

- i. **Other Equipment.** Equipment enclosures shall be located out of view as much as possible.
- j. **Temporary Tower.** A temporary tower may be allowed for the purpose of maintaining or replacing an existing tower.

#### **16.1.5 - Administrative Waiver.**

- A. Any of the above design standards may be waived by the director upon written application that demonstrates the following waiver criteria:
  - 1. The design standard prohibits or has the effect of prohibiting the provision of wireless service through the WCF at the location because the standard will not allow the technology to function at that location; and
  - 2. There is no existing nearby alternate structure for collocation or attachment that will provide the technological functionality and which otherwise meets the design standard sought to be waived; and
  - 3. The proposal for varying from the design standard represents a reasonable and best approximation of the specific standard sought to be waived; and
  - 4. The proposed alternative does not and will not constitute or create any public safety, health or welfare concern.
- B. If any design standard is approved for waiver, the WCF proposed shall nevertheless meet all other applicable design standards not approved for waiver.
- C. If a waiver request is denied for failure to meet any of the criteria specified above and there is no alternative for installation of the small cell facility at the particular location in a manner that meets the applicable design standards, then such application for the WCF for such specific location shall be denied.

#### **16.1.6 - Review Procedures.**

- A. **Review Procedures for all WCFs.** The following requirements apply to all applications for WCFs. WCFs shall be processed in accordance with Table 16.B below and this section.

**Table 16.B – Review Procedures and Requirements for Different Facility Types**

Procedure	Applies to	Notice Given	Referral	Type of Decision	Appeal to	Time-frame
<b>Building permit only</b>	• Eligible facilities requests	• n/a	• n/a	Administrative decision	Board of Appeals	60 days
<b>Site Plan (SP)*</b> – Sec. 6.0 and 6.1 of Code	• See Table 16 A for zoning districts and WCF types	• Notice of administrative decision sent to abutting property owners following administrative decision	• Sent to referral agencies within 14 days • Notice sent to cities if in a GMA	Administrative decision	BCC	90 days
<b>Public Site Plan (PSP)*</b> – Sec. 6.2 of Code	• See Table 16 A for zoning districts and WCF types	• Notice sent to neighboring properties within 500 feet of the property	• Sent to referral agencies within 14 days • Notice sent to cities if in a GMA	Administrative decision. If 30% of the neighbors note concerns, it may be reviewed by Board of County Commissioners (BCC).	BCC	90 days or 120 if BCC review
<b>Minor Special Review (MS)*</b> – Sec. 4.5 of Code	• See Table 16 A for zoning districts and WCF types	• Notice sent to neighboring properties within 500 feet of the property	• Sent to referral agencies within 14 days • Notice sent to cities if in a GMA	BCC approval including a public hearing		120 days
<b>Special Review (SR)*</b> – Sec. 4.5 of Code	• See Table 16 A for zoning districts and WCF types	• Notice sent to neighboring properties within 500 feet of the property	• Sent to referral agencies within 14 days • Notice sent to cities if in a GMA	Two public hearings: Planning Commission (PC) recommendation and BCC approval		150 days
<b>Master License Agreement (MLA) with right-of-way permit</b>	• Small cell facilities in right-of-way	• Notice sent to neighboring properties within 500 feet of each proposed facility proposed in supplemental site license	• Sent to referral agencies within 14 days of the supplemental site license submittal	Administrative right-of-way permit		90 days

\* Building permit required in addition to the planning approval.

1. **Pre-Application Conference.** Prior to applying for any WCF, an applicant is encouraged to comply with the requirements of Section 12.2.2 regarding pre-application conferences; provided however that no pre-application conference shall be required for small cell facilities. The purpose of the pre-application conference is to clarify questions of the applicant, ensure the correct process is used, and ensure that the submission of an application can be accepted. It does not indicate or qualify as the date the application is complete.
2. **Application and Completeness.** An application shall be made on forms provided by the county, in compliance with Section 12.1.A of this Code and in accordance with Table 16.B, depending on the type of facility and height. All items listed in Section 16.1.8 must be correctly and completely included in the submission before the director is able to determine accept it and before processing begins. Submissions which do not contain all

of the information will not be accepted. No application submittal will be accepted by mail without prior approval from the director.

3. **Timelines for Review.** Unless applicant and county mutually agree otherwise, applications will be processed according to the following timelines:
    - a. The review period begins to run when the application is filed and may be tolled only by mutual agreement of the county and the applicant, or in cases where the director determines that the application is incomplete.
    - b. Final action on complete applications for WCFS other than small cell facilities will be in no more than one-hundred and fifty (150) days for a new WCF and ninety (90) days for collocations that do not qualify as an eligible facilities request, provided all standards in this chapter are met.
    - c. Final action on complete applications for locating or collocating small cell facilities will be in no more than ninety (90) days, provided all standards in this chapter are met.
  4. **Decision.** Any decision to approve, approve with conditions, or deny an application for a WCF, shall be in writing and supported by a written record. The applicant shall receive a copy of the decision.
  5. **Appeal.** Any decision to approve, approve with conditions, or deny an application for a WCF must be done within the timeframes of Subsection 3 above. Written application for appeal must be in accordance with Section 22.2.2 of this Code, except that appeals must be submitted to the director within 10 days of a decision.
  6. **Compliance with Applicable Law.** Notwithstanding the approval of an application for new or modified WCFs or eligible facilities request as described herein, all work done pursuant to WCF applications must be completed in accordance with all applicable building, structural, electrical, and safety requirements as set forth in this Code and any other applicable laws or regulations. In addition, all WCF applications shall comply as follows:
    - a. Obtain any separate permit or license required as issued by a local, state, or federal agency with jurisdiction of the WCF;
    - b. Comply with easements, covenants, conditions and/or restrictions on or applicable to the underlying real property;
    - c. Be maintained in good working condition and to the standards established at the time of application approval; and
    - d. Remain free from trash, debris, litter, graffiti, and other forms of vandalism. Any damage shall be repaired as soon as practicable, and in no instance more than 10 calendar days from the time of notification by the county or after discovery by the owner or operator of the site. Notwithstanding the foregoing, any graffiti on WCFs located in the rights-of-way or on public property may be removed by the county at its discretion, and the owner and/or operator of the WCF shall pay all costs of such removal within 30 days after receipt of an invoice from the county.
  6. **Compliance Report.** The applicant shall provide a compliance report within 45 days after installation of a WCF, demonstrating that, as installed and in operation, the WCF complies with all conditions of approval, applicable code requirements, federal, state and/or local laws, and/or regulations.
- B. **Review Procedures for all WCFs except Eligible Facilities Requests.** No new WCF shall be constructed and no collocation or modification to any WCF may occur except after a written request from an applicant, reviewed and approved by the county in accordance with this

chapter. All WCFs except eligible facilities requests which are reviewed under subsection (D) of this section, shall be reviewed pursuant to the following procedures.

- 1. Review Procedures for Towers, Base Stations Not in the Right-of-Way.** In all zoning districts, applications for towers shall be reviewed by the county for conformance with this chapter and using the procedures set forth in Sections based on the type of review required and noted in Table 16.B and design criteria.
  - a.** Review Procedure types and criteria.
    - i. Site Plan procedures and criteria are set forth in Section 6.0 and 6.1 of this Code.
    - ii. Public Site Plan procedures and criteria are set forth in Section 6.2 of this Code.
    - iii. Minor Special Review procedures and criteria are set forth in Section 4.5 of this Code.
    - iv. Special Review procedure and criteria are set forth in Section 4.5 of this Code.
  - b.** All applications for towers shall demonstrate that other alternative design options, such as using base stations or alternative tower structures, are not viable options as determined by the county.
  - c.** Applications that are within five hundred (500) feet of residentially zoned property shall require a courtesy notification to abutting property owners.
  - d.** Applications will be referred to the relevant city if within a Growth Management Area (GMA).

**Notes:** Chapters 4, 12, and 22 will need minor language amendments to be consistent with the provisions in this chapter as follows:

**Chapter 4** – Change Section 4.5.3.F to add that “additional criteria in Sec. 4.3, use descriptions, and all applicable requirements of this code shall apply.”

**Chapter 12** – Add language to reference the specific timeframes and procedures in Chapter 16 as follows. In Section 12.2.2, Pre-application conferences (to exempt small cell facilities), add: “except for small cell facilities as defined in Chapter 16 of this code.” In Section 12.2.3, Sketch Plan, add: “except for small cell facilities.”

**Chapter 22** – In Section 22.2.2.A.1, note that written applications must be submitted within 30 days, “except for WCFs”.

- 2. Review Procedures for Small Cell Facilities in the Right-of-Way.** Small cell facilities are permitted within the right-of-way, subject to approval of a master license agreement executed by the county manager and adherence to all the following standards:
  - a.** Small cell facilities shall be a permitted use by right in county rights-of-way subject to review and approval from the county.
  - b.** No new small cell facility shall be constructed in the right-of-way except after a written request from an applicant is reviewed and approved by the county in accordance with this section; after execution of a license agreement with the county, if required, or other legal right or approval to use such structure by its owner; and upon issuance of a building permit. All work done pursuant to small cell facility applications must be completed in accordance with all applicable building and safety requirements as set forth in this Code and any other applicable regulations.

- c. New small cell facilities shall be contained in a structure that is architecturally compatible with the surrounding area through application of camouflage and concealment design techniques.
  - d. Applications for WCFs in the rights-of-way that are adjacent to residentially zoned property shall require a courtesy notification to abutting property owners.
  - e. Applications will be referred to the relevant city if within a Growth Management Area.
- C. **Review Procedures for Eligible Facilities Requests.** This section applies to any eligible facilities requests for collocation on, or modification to an existing tower or base station that does not substantially change the physical dimensions of such facility or change the land use classification of the structure.
  - 1. **Review Required for Eligible Facilities.** No collocation or modification to any existing tower or base station may occur except after a written request from an applicant is reviewed and approved by the director.
  - 2. **Review Criteria.** Upon receipt of an application for an eligible facilities request pursuant to this section, the county shall review administratively such application to determine whether the application meets the following criteria for an eligible facilities request:
    - a. Does not result in a substantial change;
    - b. Does not violate a generally applicable law, regulation, or other rule reasonably related to public health and safety and complies with generally applicable building, structural, electrical, and safety codes;
    - c. Complies with the original application design elements or conditions of approval, including but not limited to colors, textures, surfaces, scale, character, and siting, or any approved amendments thereto, subject to the thresholds established in the definition of substantial change; and
    - d. Complies with concealment elements of the eligible support structure necessary to qualify as a concealed facility.
  - 3. **Timeframe for Reviewing Eligible Facilities Requests.** Subject to the tolling provisions of subparagraph (4) below, within sixty (60) days of the date on which an applicant submits a complete application, as determined by the director, seeking approval under this subsection, the county shall approve the application unless it determines that the application is not covered by this section or otherwise in non-conformance with applicable codes.
  - 4. **Tolling of the Timeframe for Review.** The 60-day review period begins to run when the submission of a completed application is accepted and may be tolled only by mutual agreement of the county and the applicant, or in cases where the director determines that the application is incomplete.
    - a. To toll the timeframe for corrections in the application, the county must provide written notice to the applicant within thirty (30) days of receipt of the application, specifically delineating all missing documents or information required in the application;
    - b. The timeframe for review continues running again the following business day after the applicant makes a supplemental written submission in response to the county's notice of incompleteness; the timeframe may be reset pursuant to FCC guidelines; and
    - c. Following a supplemental submission, the county will notify the applicant within ten (10) days that the supplemental submission did not provide the information identified in the original notice delineating missing information. The timeframe is tolled in the case of second or subsequent notices pursuant to the procedures identified above in (a) and (b). In the case of a second or subsequent notice of

incompleteness, the county may not specify missing information or documents that were not delineated in the original notice of incompleteness.

5. **Interaction with Telecommunications Act Section 332(c)(7).** If the county determines that the applicant's request is not an eligible facilities request as delineated in this section of the Code, the presumptively reasonable timeframe under Section 332(c)(7), as prescribed by the FCC's Shot Clock order, will begin to run from the issuance of the county's decision that the application is not a covered request. To the extent such information is necessary, the county may request additional information from the applicant to evaluate the application under Section 332(c)(7) reviews.

#### 16.1.7 - Application Requirements.

- A. **Application.** Applications shall follow the procedures set forth in 16.1.6.A.1 and A.2.
- B. **Application Not Required for Maintenance.** A WCF application is not required for routine maintenance or replacement of existing facilities or equipment, so long as the new facilities or equipment are consistent with the approved size, height, concealment, screening, and other applicable site and facility design elements being replaced. A building permit is required for all routine maintenance or replacement of existing facilities or equipment.
- C. **Application Requirements for all WCFs Except Eligible Facilities Requests.** The following items are required for all non-eligible facilities request WCF applications. Other requirements may be identified on the current application form. All items must be included to be determined to be a complete application by the director:
  1. **Vicinity Map.** A vicinity map shall be provided. Such map shall include all residential properties located within 1,000 feet of the proposed site.
  2. **Project Description.** A project statement identifying the proposed facility and the communication service to be provided by the proposed facility. The project statement must indicate the facility's suitability for co-location, which is encouraged where co-location will have less visual impact on the surrounding area than another facility. The project description shall include a written description of how the proposal complies with all applicable WCF standards.
  3. **Proof of Ownership or Lease Rights.** The applicant shall demonstrate that it owns or has lease rights to the subject site (prior to construction). The owner shall sign the application form or provide a letter of authorization.
  4. **Photo-Realistic Simulations or Renderings.** Photo simulations which illustrate "before" and "after" conditions as they relate to installation of the WCF except for small cell facilities. Photos should be taken from all adjoining public streets and, when adjacent to residential properties, from the vantage point where the WCF and equipment will be visible.
  5. **Elevation Drawings.** Elevation drawings of the proposed facility and any ground-based equipment. The drawings should indicate the location on the site, height, appearance, color, and material proposed, including information concerning topography.
  6. **Plan.** A site and rooftop plan shall be provided which indicates the location, dimensions, setbacks, and height of all existing and proposed WCF, including freestanding facilities, antenna, and ground based equipment. Proposals that include freestanding facilities or ground based equipment shall show all existing and proposed buildings, landscaping, and fencing on the site. Plans shall indicate materials and colors of poles and equipment, setbacks, adjacent uses, drainage, compliance with the county's intersection and driveway sight distance standards, and other information deemed by the director to

- be necessary to assess compliance with this section. Information and documents regarding fencing and landscaping shall be provided by applicant where applicable and at the request of the director. Documents requiring signatures and seals by appropriate qualified professionals shall be provided by the applicant after approval of the application by the director
7. **Signal Non-Interference Letter.** A letter certifying all WCFs shall be designed, sited, and operated in accordance with applicable federal regulations addressing radio frequency interference.
  8. **Radio Frequency Emissions Letter.** A letter certifying all WCFs shall comply with federal standards for radio frequency emissions and that they shall be monitored to ensure ongoing compliance.
  9. **Submittal fees.** Application fees in accordance with the fee scheduled published annually in the Community Development Department.
  10. **Landscaping Agreement.** If in a Growth Management Area, an agreement detailing the schedule for installation of landscaping and screening if applicable and responsibility for landscaping, screening, and site maintenance and the replacement of dead landscaping.
  11. **Federal Aviation Administration (FAA) letter.** If located near an airport as defined by an airport influence area or in a flight path, the application must include an FAA response to the notice of proposed construction or alternation (FAA Form 7460-1 or equivalent).
  12. **Inventory of Existing Sites.** For WCFs that are not small cell facilities in the right-of-way, the applicant shall provide a narrative description and a map of the applicant's existing or currently proposed WCFs within the county and within one mile of county boundaries. In addition, the applicant shall inform the county generally of the areas in which it believes WCFs may need to be located within the next three (3) years. The inventory list should identify the site name, address, and a general description of the facility (i.e., rooftop antennas and ground-mounted equipment). This provision is not intended to be a requirement that the applicant submit its business plan, proprietary information, or make commitments regarding locations of WCFs within the county. This information will be used to assist in the county's comprehensive planning process and promote collocation by identifying areas in which WCFs might be appropriately constructed for multiple users.
  13. **For small cell facilities in the right-of-way.** The applicant shall provide an inventory of existing or proposed small cell facilities in the right-of-way. Alternatively, the execution of a master license agreement or similar authorization for deployment in the right-of-way which addresses the requirements of this subsection shall be deemed to be compliance with the submittal requirement of an inventory of existing sites for small cell facilities in the right-of-way.
  14. **Abandonment and Removal.** A letter or affidavits on a form approved by the county shall be required from the owner of the property and from the applicant acknowledging that each is responsible for the removal of a WCF that is abandoned or is unused for a period of six (6) months.
  15. **For properties in floodplains or in or near wetlands.** The applicant will need to submit a drainage report.
  16. **For properties with federally significant historic or environmental features.** Applicant shall submit letter and documentation showing that all National Environmental Policy Act (NEPA) requirements have been met.
  17. **Building permit application.** The applicant will submit a building permit application to be processed concurrently.

18. **Sharing of Information.** The county may share such nonproprietary information with other applicants applying for administrative approvals or conditional permits under this section or other organizations seeking to locate WCFs within the jurisdiction of the county, provided however, that the county, is not, by sharing such information, in any way representing or warranting that such sites are available or suitable.

- D. **Application Requirement for Eligible Facilities Requests.** The director shall prepare, and from time to time revise and make publicly available, an application form which shall be limited to the information necessary for the county to consider whether an application is an eligible facilities request. The application may not require the applicant to demonstrate a need or business case for the proposed modification or collocation. Such information may include, without limitation in addition to the application requirements for other WCFs above, whether the project:
1. Would result in a substantial change;
  2. Violates a generally applicable law, regulations, or other rule codifying objective standards reasonably related to public health and safety.

#### 16.1.8 - Definitions.

***Note:** Chapter 0.1, Definitions, will need amendments to replace terms that are newly defined or carried forward in Chapter 16 (i.e., Antenna, Collocation, Microcell) and to remove definitions that are no longer used (i.e., Antenna, attached, Antenna, concealed, Antenna, setback, Antenna, tower, Antenna tower height, Commercial mobile radio service (CMRS), Facility, CMRS, Facility, CMRS temporary, Radio and television transmission).*

**ACCESSORY EQUIPMENT.** Any equipment serving or being used in conjunction with a WCF, including, but not limited to, utility or transmission equipment, power supplies, generators, batteries, cables, equipment buildings, cabinets and storage sheds, shelters, or other structures including fences.

**ALTERNATIVE TOWER STRUCTURE.** Man-made trees, clock towers, bell steeples, light poles, traffic signals, buildings, and similar alternative design mounting structures that are compatible with the natural setting and/or surrounding structures, and camouflages or conceals the presence of antennas or towers so as to make them architecturally compatible with the surrounding area pursuant to this chapter including height limits as set forth in this code. This term also includes any antenna or antenna array attached to an alternative tower structure. A stand-alone monopole (including a replacement pole) in the right-of-way that accommodates small cell facilities is considered an alternative tower structure to the extent it meets the camouflage and concealment standards of this chapter.

**ANTENNA.** Any device used to transmit and/or receive radio or electromagnetic waves such as, but not limited to panel antennas, reflecting discs, microwave dishes, whip antennas, directional and non-directional antennas consisting of one or more elements, multiple antenna configurations, or other similar devices and configurations, and exterior apparatus designed for telephone, radio, or television communications through the sending and/or receiving of wireless communications signals.

**APPLICANT.** (Relevant to this chapter of the Code.) Any person who submits an application to the county to site, install, construct, collocate, modify and/or operate a WCF.

**BASE STATION.** A structure or equipment at a fixed location that enables FCC-licensed or authorized wireless communications between user equipment and a communications network. The definition of base station does not include or encompass a tower as defined herein or any equipment associated with a tower including the defined accessory equipment. Base station includes, without limitation:



1. Equipment associated with wireless communications services such as private broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul that, at the time the relevant application is filed with the county under this chapter of the Code and has been reviewed and approved under the applicable zoning or siting process, or under another State or local regulatory review process, even if the structure was not built for the sole or primary purpose of providing such support; and
2. Radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplied, and comparable equipment, regardless of technological configuration (including distributed antenna systems (“DAS”) and small-cell networks) that, at the time the relevant application is filed with the county, has been reviewed and approved under the applicable zoning or siting process, or under another State or local regulatory review process, even if the structure was not built for the sole or primary purpose of providing such support.

The definition of base station does not include any structure that, at the time the relevant application is filed with the county, does not support or house equipment described in paragraphs 1 and 2 above.

**CAMOUFLAGE, CONCEALMENT, OR CAMOUFLAGE DESIGN TECHNIQUES.** A WCF is camouflaged or utilizes camouflage design techniques when any measures are used in the design and siting of WCF with the intent to eliminate or as much as reasonably possible minimize the visual impact of such facilities to surrounding uses. A WCF site utilizes camouflage design techniques when it (i) is integrated in an outdoor fixture (such as a flagpole), or (ii) uses a design which mimics and is consistent with the nearby natural, or architectural features (such as an artificial tree, steeple, or silo) or is incorporated into (including, without limitation, being attached to the exterior of such facilities and painted to match it) or replaces existing permitted facilities (including without limitation, stop signs or other traffic signs or freestanding light standards) so that the presence of the WCF is not readily apparent.

**COLLOCATION.** The mounting or installing of a WCF on a pre-existing structure, and or 2) modifying a structure for the purpose of mounting or installing a WCF on that structure provided that, for purposes of eligible facilities requests, “collocation” means the mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and /or receiving radio frequency signals for communications purposes.

**DIRECTOR.** The Director of Community Development, or their designee.

**ELIGIBLE FACILITIES REQUEST.** Any request for modification of an existing tower or base station that does not substantially change the physical dimensions of such tower or base station involving: (i) collocation of new transmission equipment, (ii) removal of transmission equipment, or (iii) replacement of transmission equipment.

**ELIGIBLE SUPPORT STRUCTURE.** Any tower or base station as defined in this chapter, if it is existing at the time the relevant application is filed with the county under this chapter of the Code.

**EXISTING TOWER OR BASE STATION.** A constructed tower or base station that was reviewed, approved, and lawfully constructed in accordance with all requirements of applicable law as of the time it was built. For example, a tower that exists as a legal, non-conforming use and was lawfully constructed is existing for purposes of this definition.

**MASTER LICENSE AGREEMENT.** A legal contract between the County (the licensor) and a telecommunications provider (the licensee). The licensor grants the licensee the right to non-exclusively use the right-of-way for the purpose of small cell facilities according to the terms of the agreement.

**MICROCELL.** A low power WCF used to provide increased capacity in high telecommunication demand areas or provide in-fill coverage in areas of weak reception, including a separate transmitting and receiving station serving the facility.

**MONOPOLE.** A single, freestanding pole-type structure supporting one or more antennas.

**OVER-THE-AIR-RECEIVING-DEVICE (OTARD) ANTENNA:**

1. An antenna that is designed to receive direct broadcast satellite service, including direct-to-home satellite services, that is one meter (1 m) or less in diameter; or
2. An antenna that is designed to receive video programming services via multipoint distribution services, including multichannel multipoint distribution services, instruction television fixed services, and local multipoint distribution services, and that is one meter (1 m) or less in diameter or diagonal measurement; or
3. An antenna that is designed to receive television broadcast signals.

**POLE-MOUNTED SMALL CELL FACILITY.** A small cell facility with antenna that are mounted and supported on an alternative tower structure, which includes a replacement pole.

**PUBLIC PROPERTY.** Real property owned or controlled by the county, excluding the right-of-way.

**RADIO FREQUENCY EMISSIONS LETTER.** A letter from the applicant certifying, all WCFs that are the subject of the application shall comply with federal standards for radio frequency emissions.

**RADIO OR TELEVISION TOWER OR TRANSMITTER.** Freestanding non-concealed communications facilities used to transmit radio and television broadcasts, including: lattice towers, monopole towers, guyed towers, or other freestanding facilities that do not meet the definition of a freestanding concealed communications facility.

**READILY APPARENT.** For purposes of determining whether a WCF is readily apparent, the phrase means that the facility, in the discretion of the director, will be easily recognizable as a WCF to a reasonable person viewing the facility as a whole and in the context of any adjacent improvements and landscaping from publicly accessible locations when considering the character, scale, and height of nearby and surrounding natural or architectural features. Methods of design and construction that may assist in reducing the visibility of a facility and reaching a conclusion that a facility is not readily apparent include the use of color mimicking surrounding structures and landscaping, minimizing facility size to the greatest extent feasible, integrating the facility into any adjacent or attached improvements, and positioning the facility in a manner that limits the degree to which the facility projects away from any adjacent structures or landscaping. Due to differences in site characteristics, a determination that a particular WCF will not be readily apparent at one location shall not establish a precedent for the same determination for a facility of the same or similar design or construction at a different location.

**REPLACEMENT POLE.** A newly constructed and permitted traffic signal, utility pole, street light, flagpole, electric distribution, or street light poles or other similar structure of proportions and of equal height or such other height that would not constitute a substantial change to a pre-existing pole or structure in order to support a WCF or small cell facility or to accommodate collocation and remove the pre-existing pole or structure.

**RIGHT-OF-WAY.** Any public street, way, alley, sidewalk, median, parkway, or boulevard that is dedicated to public use.

**SITE.** For this chapter of the Code, the area comprising the base of the structure and other related accessory equipment deployed on the ground including the area to be leased.

**SMALL CELL FACILITY.** A WCF where each antenna is located inside an enclosure of no more than three (3) cubic feet in volume, or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an imaginary enclosure of no more than three (3) cubic feet; and primary equipment enclosures are not larger than seventeen (17) cubic feet in volume. The following associated equipment may be located outside of the primary equipment enclosure and, if so located, is not included in the calculation of equipment volume: electric meter, concealment, telecommunications demarcation box, ground-based enclosure, back-up power systems, grounding equipment, power transfer switch and cut-off switch.

**SIGNAL NON-INTERFERENCE LETTER.** A letter from the applicant certifying, all WCFs that are the subject of the application shall be designed, sited and operated in accordance with applicable federal regulations addressing radio frequency interference.

**SUBSTANTIAL CHANGE.** A modification that substantially changes the physical dimensions of an eligible support structure if, after the modification, the structure meets any of the following criteria:

1. For towers, other than alternative tower structures in the right-of-way or other towers in the right-of-way, it increases the height of the tower by more than ten (10) percent or by the height of one additional antenna array, with separation from the nearest existing antenna not to exceed twenty (20) feet, whichever is greater; for other eligible support structures, it increases the height of the structure by more than ten percent or more than ten (10) feet, whichever is greater;
2. For towers, other than towers in the right-of-way, it involves adding an appurtenance to the body of the tower that would protrude from the tower more than twenty (20) feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater; for eligible support structures, it involves adding an appurtenance to the body of the structure that would protrude from the side of the structure by more than six feet;
3. For any eligible support structure, it involves installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets; or for towers in the right-of-way and base stations, it involves installation of any new equipment cabinets on the ground if there are no pre-existing ground cabinets associated with the structure, or else involves installation of ground cabinets that are more than ten percent larger in height or overall volume than any other ground cabinets associated with the structure;
4. For any eligible support structure, it entails any excavation or deployment outside the current site;
5. For any eligible support structure, it would defeat the concealment elements of the eligible support structure. For the purposes of this subsection (5), a change which undermines the concealment elements of an eligible support structure will be considered to defeat the concealment elements; or
6. For any eligible support structure, it does not comply with conditions associated with the siting approval of the construction or modification of the eligible support structure equipment, unless the non-compliance is due to an increase in height, increase in width, addition of cabinets, or new excavation that would not exceed the thresholds identified in paragraphs (1), (2), and (3) of this definition. For purposes of determining whether a substantial change exists, changes in height are measured from the original support structure in cases where deployments are or will be separated horizontally, such as on buildings' rooftops; in other circumstances, changes in height are measured from the dimensions of the tower or base station, inclusive of originally approved appurtenances and any modifications that were approved prior to February 22, 2012.

**SUPPORT STRUCTURE.** A structure designed to support small cell facilities including, but not limited to, monopoles, alternative tower structures, replacement poles, and other freestanding self-supporting pole structures.

**TOLL AND TOLLING.** Toll and tolling shall mean to delay, suspend or hold off on the imposition of a deadline, statute of limitations or time limit.

**TOWER.** Any structure built for the sole or primary purpose of supporting one or more FCC-licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless communications services including, but not limited to, private broadcast services as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site.

**TRANSMISSION EQUIPMENT.** Equipment that facilitates transmission for any FCC licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

**WIRELESS COMMUNICATIONS FACILITY (WCF)** means a facility used to provide personal wireless services as defined at 47 U.S.C. Section 332 (c)(7)(C); or wireless information services provided to the public or to such classes of users as to be effectively available directly to the public via licensed or unlicensed frequencies. A WCF does not include a facility entirely enclosed within a permitted building where the installation does not require a modification of the exterior of the building; nor does it include a device attached to a building, used for serving that building only and that is otherwise permitted under other provisions of the Code. A WCF includes an antenna or antennas, including without limitation, directional, omni-directional and parabolic antennas, support equipment, alternative tower structures and towers. It does not include the support structure to which the WCF or its components are attached if the use of such structures for WCFs is not the primary use. The term does not include mobile transmitting devices used by wireless service subscribers, such as vehicle or hand-held radios/telephones and their associated transmitting antennas, nor does it include other facilities specifically excluded from the coverage of this Code.

## **Attachment B – What’s Changed Since the August 14 Wireless Communications Facilities draft?**

Since August 21, the draft has been further modified to address comments:

- **Section 16.1.1 – Intent and Purpose.**
  - o First paragraph - Replaces language “in consideration of the public health, safety, and general welfare...” with that from subsection A stating: “...that accommodates the communication needs of residents and businesses, protects the public, health, safety, and general welfare of the community, and minimizes adverse impacts,” (deletes similar language from subsection A).
  - o In A, Purpose sections 6, 8 - clarifies that the purpose and this language applies to all “WCFs” not just towers.
  - o In A, Purpose section 10 - clarifies that “small cell facilities” not all WCFs may be in the right-of-way.
  - o In B.1, Applicability - removes “macro cell facilities” which are a subset of towners and alternative tower structures and not in the definitions.
  - o In Section C.1, Permit Required – adds “or right-of-way permit” as a possible requirement.
  - o In Section D, Severability – adds, “or by federal or state statute or regulation...”
- **Section 16.1.2 – Where Allowed.**
  - o Table 16.A – includes minor changes. Deletes “eligible facilities” from first column. Adds cross reference to Table 16.B for procedures.
- **Section 16.1.3 – Operational Standards for WCFs.**
  - o Section A, Federal “and State” Requirements – adds “state” requirements so that all federal and state regulations apply. Adds a note requiring applicants to comply with federal ADA requirements.
  - o Section D, Abandonment and Removal – Slightly modifies language noting that county may not approve a new application until the applicant has removed an abandoned WCF or made payment. This section is otherwise consistent with later submittal requirements.
- **Section 16.1.4 – Design Standards.**
  - o Section A.c – Note: keeps the 30% setback requirement for all other property adjacencies to incentivize collocation on structures but could remove it if Planning Commission thinks it will be challenging in commercial districts.
  - o Section B.1.a. – Adds “growth management area” to section noting camouflage design importance.
  - o Section B.6, Fire Protection (new) - adds standards reflecting feedback from a fire district regarding standards for fire-detection and extinguishing systems and defensible space, access, and possible approved water supply in a wildfire hazard area.
  - o Section B.8, Residential Buildings – carries forward a similar provision from current code prohibiting WCFs on buildings used principally for residential purposes. (Note: definitions for structures and principal residential purpose exist in current Code.)
  - o Section C.5.b, Design Standards for Small Cell Facilities in the Right-of-Way - notes that the Master License Agreement includes preferred locations for siting facilities on streets, support structures, and their general placement. (See Attachment D.)
- **Section 16.1.5 – Administrative Waiver.** No changes suggested.

- **Section 16.1.6 – Review Procedures.**
  - Table 16.B
    - adds a row for “Building Permit Only” for “eligible facilities requests” which had included under the Site Plan process.
    - Public Site Plan – Adds a “30% threshold” for concerned neighbors to send item to Board of County Commissioners (BCC) and clarifies a longer timeline if going to BCC.
    - Adds a row for the Master License Agreement (MLA)
    - Notes that building permit is required in addition to planning approval.
  - Section A.1, Pre-Application Conference – clarifies it is not required but helps answer questions and ensure the correct process and application.
  - Section A.2, Application and Completeness - Clarifies application approach and completeness to be consistent with Section 12.1.A of the Code.
  - Section A.5, Appeal – Clarifies that written application for appeal must be submitted within 10 days of a decision in order to meet shot clock requirements. Cross references Section 22.2.2 of the Code.
  - Section C, Review Procedures for Eligible Facilities Requests – add... “or change the land use classification of the structure.”
  - Section C.4, Tolling – clarifies the timeline relative to complete application and reset pursuant to FCC guidelines.
- **Section 16.1.7 - Application Requirements.**
  - Section C - notes that “other requirements may be identified on the current application form,” so this section doesn’t have to be amended when new needs are identified.
  - Section C.4 – includes an exception for small cell facilities for photo simulations.
  - Section C. 8, Radio Frequency Emissions Letter – adds that WCFs “shall be monitored to ensure ongoing compliance.”
  - New Section C.15 – adds that properties in floodplain/wetlands require a drainage report submission.
  - New Section C.16 – adds that for properties with federally or significant historic or environmental features, they must satisfy NEPA requirements.
  - New Section C.17 – adds that building permit application will be submitted concurrently. This is to meet shot clock requirements.
- **Section 16.1.8 – Definitions.**
  - Adds definitions for Master License Agreement and Microcell

## **Attachment C – Notes from Aug. 21, 2019 Work Session and other Comments**

### **Wireless Communications Facilities Work Session Notes**

1. Can jurisdictions include the historical and environmental reviews? Could application submittal requirement include reference to NEPA and historic reviews -- having completed that process before being deemed complete? Yes. Most cases won't involve these factors.
2. Take a closer look at the 30% setback requirement for Red Feather Lakes Business zoning district. That may not work where buildings are closer together. Should certain types of WCFs be required or prohibited there?
3. Clarify when shot clock stops relative to our processes and complete applications.
4. Include a quantitative threshold of public engagement (nay-sayers) for when to send a Public Site Plan (PSP) (e.g., when 30% of public comments are expressing concern) to BCC.
5. Clarify the small cell definition relative to towers (and in the purpose statement). Small cells should not be defined as a subset of towers.
6. Clarify the reference to the colocation on a residential structure on a lot. What's meant by it (clarify it's for the principle use, not sheds, etc.)
7. Can we better organize the regulations to have Tables A (zoning) and B (procedures) closer together?

Two planning commissioners provided notes at the end of the meeting addressing:

- language inconsistencies in the Abandonment and Removal section and the later submittal requirements related to abandonment and removal and asked about possible cash bond.
- How to enforce the abandonment language. Should there be some sort of annual registration for facilities so county can keep tabs on active facilities?

### **Written Comments Pertinent to Draft Regulations**

- Email from Weins, 08.18
- Email from Morgan, 08.19
- Email from Peck, 08.21
- Email from Temmer, 08.21
- Email from Peck, 08.25
- Email from Dann, Loveland Fire, 08.27
- Email from Weins, 08-26
- Comments from Commissioner Kefalas and Planning Commissioner Johnson

### **Comments Provided in Survey Monkey Questionnaire**

As another means to provide comments, the county hosted an online comment form from August 19 through 28<sup>th</sup>. We received 17 sets of responses of which 15 were duplicates cut and pasted. To save paper while ensuring that all unique comments are included for review, the attached version includes the 6 responses containing some levels of differences.



Lesli Ellis

---

## Wireless Regulations Study Session Update August 21

---

**John Weins** <

To: ellislk

Cc:

Sun, Aug 18, 2019 at 10:15 AM

To Leslie Ellis and Frank Haug:

August 18

I'm looking forward to reviewing the most recent updated Wireless Regulations before the August 21 Study Session

Considering the recent lawsuit filed against the tobacco industry to strengthen the warning labels on the cigarette packages, and the inherent dangers in deploying the new 5G technology, I'm confident that Larimer County has planned an extensive educational program to educate the Larimer County citizens about the inherent risks and dangers they will be confronted with the roll out of the 5G technology.

I'm sure this educational program would include the WHO's (World Health Organization) 2011 decision to classify wireless radiation as a Class 2B Carcinogen. Also included would be the recent landmark \$25 million Government NTP Study that established a link between brain and heart cancer cells and wireless radiation. Also included would be the fact that the most vulnerable segments of the population to the detrimental health effects of wireless radiation include pregnant women, children, and senior citizens. Also included would be a list of the most common symptoms that many Larimer County citizens will likely be experiencing as a result of the 5G roll out: sleep problems, fatigue, exhaustion, lack of energy, restlessness, heart palpitations, blood pressure problems, muscle and joint pain, headaches, depression, difficulty concentrating, forgetfulness, anxiety, urinary urgency, anomia (difficulty finding words), dizziness, tinnitus and sensations of pressure in the head and the ears, tightness in chest, hyperactivity, irritability, noise sensitivity, burning sensation in the eyes and skin conditions.

Of course it would be unthinkable not to include in the 5G study material that significant health problems are now exploding among adults in their mid and late twenties, the population that has grown up amidst wireless radiation.

You must already know how many Larimer County families are willing to sacrifice one of their loved ones, a beloved son or daughter, a husband or wife, a mother or father, or a grandmother or grandfather, in exchange for the benefits of the 5G technology.

Sincerely,

John Weins

Larimer County resident





**International Experts Perspective on the Health Effects of EMF and EMR.docx**

42K



---

## Wireless communication facilities regulations

---

**Roger Morgan** <>

Mon, Aug 19, 2019 at 1:47 PM

To: "ellislk">

Cc: ">

Lesli—

I have been assisting my neighbors in the possible leasing of a free standing stealth cell tower site on their dairy farm. The proposed free standing facility meets the design goals of camouflage and concealment and contemplates collocation of wireless service providers. In doing some research last week I became aware that Larimer County is in the process of revising the county Wireless Communication regulations.

The current code permits the stealth tower on their farm, however the proposed regulations change the permitted use in the RE- Rural Estate zone and would not allow a free standing stealth tower. This situation arises due to a historical quirk in the Larimer County zoning district titles.

The Larimer county RE- Rural Estate zone is a farming area roughly 5.5 miles by 1.5 miles, bounded by Hwy 287 on the south and county road 62E on the north and by N. Shields Street on the east and the western boundary ½ mile west of Taft Hill Road. This area is one of the last irrigated farm segments north of Fort Collins. The permitted land uses in RE closely parallel the uses in the FA and FA-1 zoning classifications, the principal difference is that RE zoning density is 10 acres per dwelling unit, where FA and FA-1 are one unit per 2.33 acres with septic and .5 acres per unit in the case of FA with public sewer. Essentially the RE zone is an agricultural zoning district with less intensive residential density than FA and FA-1. I would further note that the above described area is basically the only place in the Larimer County where the RE zoning district is applied.

I believe the proposed Wireless Communication regulations should continue to permit free standing stealth cell towers in the RE zoning classification. The new wireless communication regulations should permit the above described RE- Rural Estate area to have the same cell tower uses as the proposed regulation contemplates for the FA and FA-1 zoning classifications.

Appreciate your assistance as the new regulation development proceeds. If I can offer additional input please call on me.

Thanks

Roger Morgan

Sent from [Mail](#) for Windows 10

**August 21, 2019**

**Citizen Comment for Joint Study Session of Larimer County Commissioners**

Comments on Attachment A – Land Use Code DRAFT Regulations

16.0 Wireless Communications Facilities

Page A-1

A. Purpose

2. Promote and protect the public health,.....

The regulations proposed address only visibility and structural integrity of WCFs in the public ROW. We ask if a policy statement can be issued by the County to address the County's desire to meet all legal requirements of federal and state law, and citizens have deep concerns on the health and environmental effects of 24/7 RF exposures, particularly near their homes. The County has been prohibited by federal law to address the health effects of RF at this time. But recent court ruling in the case of the NRDC vs. FCC has restored environmental and historical reviews. It is a tumultuous legal regime on this subject nationwide creating challenges for local governments. Should future federal and state laws or court ruling open up the opportunity the County will address the concerns of citizens therein to RF exposures and update the Land Use Code. Furthermore, the ruling by the D.C. Court of Appeals in favor of the NRDC vs. FCC case will allow the County to include environmental and historical reviews. Too new a ruling at this time, the regulation draft does not now include these options.

A policy statement issued in conjunction with the Land Use Code would guide County staff and the maintenance of the Master License Agreements (MLA) in consistent policy fashion. It would inform the public that their concerns have been heard and acted upon to the best of the ability of the County to do so.

### Purpose (Cont.)

6. Encourage the location of towers in non-residential areas in a manner that minimizes the total number of towers needed throughout the community.

8. Encourage owners and users of antennas and towers to locate them, to the extent possible in areas where the adverse impact to the community is minimized.

The important distinction here is the word “towers” and therefore Item 6 of purpose above omits all poles and structures under 40’ in height and the wide range of antenna installations that can be located on existing infrastructure like street lights, telephone poles, sides of buildings.

While Item 8 calls for antennas to be located where the adverse impact to the community is minimized, there is no item found in the regulations that appears to result in such actions. The use of preferred locations in the regulations rather than mention in the MLA would be regulatory not contract.

### Questions and Comments on Definitions pg. A-16 – A.19

Definitions in the Land Use Code for the equipment of WCFs is very important to understand and apply so the public and applicants will clearly know what type of WCF is being allowed in each zoning district, the review procedures for each type of equipment and the public notice given for each. The definitions section needs to be expanded to include missing definitions, and each definition used in the MLA in the same manner.

We ask our Commissioners to use a clear understanding of each definition in the review of the proposed Land Use Code. All WCF equipment listed in the definitions are combined, configured, mounted and placed throughout the community for a wireless network. They all contain powerful antennas transmitting RF 24/7. In years past, transmitting antennas such as these were located in industrial and commercial areas and kept away from our homes where we rest and restore.

Page A-16 defines **Antennas**

Page A-17 defines **Monopoles, Pole-Mounted Small Cell Facility, Colocation**

Page A-18 defines **Small Cell Facility**

Page A-19 defines **Wireless Communications Facility (WCF)**

Page A-19 defines **Towers**

**Table 16.A** *Zoning Districts Where SCFs are Allowed* (pg. A-3) and **Table 16.B** *Review Procedures and Requirements for Different Facility Types* (pg. A-10) force the reader to flip back and forth between the two and apply definitions of the type of WCF equipment in the header column of Table 16. A (i.e. “attached facility on existing structure”, “small cell facility”, “alternative tower structured (concealed)” and “Tower non-concealed” to the type of review (SP, PSP, MS, SR etc.) in order to then examine Table 16. B to figure out which “decision” i.e. review type) will occur and the public notice and options for appeal therein. One has to flip back and forth to figure the application, decision (review), public notice and appeal process for each type of WCF equipment.

If the tables retain these descriptions as the header on Table 16.A, then two definitions should be added to the definitions beginning on pg. A-16.

- Attached Facility on Existing Structure (including eligible facilities)
- Alternative Tower Structure (Concealed)

Definitions missing but contained in the draft of the Land Use Code and the MLA are:

- MLA, pg. 29 (11):
- macro base station,
- macros wireless tower,
- macro wireless communication facility.

Definitions in the MLA should be consistent with the regulations. At this time, they are not, perhaps just an edit issue in the final drafts still to come. The public appreciates the disclosure of the MLA by the County.

---

### **The Most Salient Concern of Citizens in the Land Use Code as drafted in Attachment A**

The important concern in definitions and their application to the Land Use Code and each term used in Table 16.A and 16.B and meeting the Purpose of the Land Use Code described in Item 6. and 8 above is to interpret clearly where the wireless network equipment will be deployed and how it impacts the places we sleep and restore. Currently the only equipment encouraged to be located out of residential areas is a tower over 40' high. There is nothing in the regulations to encourage or keep WCFs away from the front of our house and on the stations of our first responders.

So, if an antenna is on the light post out in front of a home, it makes since to the wireless provider to have a stronger signal at the level of the second story because it would allow for a stronger RF signal for more people – clearing the roof line[s] most likely. But the big negative for humans in the house 30 ft away is that the power density, would be outrageous because it's just past the antenna's near field and just into the beginning of the far field. In RF terminology – that is when the two parts (the electric part and the magnetic part) of the transmission separate to such a degree that RF wave travels thru the air – hence the electromagnetic radiation term. Field strength is related to the distance (the inverse square) so the farther you are from the signal source (the antenna/transmitter) the lower the power density of the radiated frequency.

Setbacks allow the power density to decrease given sufficient distance from the home. There are no setbacks in the ROW. Pg. A-4 A.; Pg. 29, MLA (10). There are no setbacks for anything that is not a tower.

The illustration below of this near field exposure on an actual child's bedroom in a CA city where 4G/5G has been deployed in residential areas made this house uninhabitable without vacating the front bedrooms and installing RF shielding paint. The child developed severe microwave illness and the other family members experienced a number of symptoms associated with microwave illness. We are asking to address this scenario in the Land Use Code, to implement significant setbacks regardless if the WCF is in the public right of way (ROW) or not.









Larimer County has police powers under HB 17-1193 and we are asking you to explore all options to exercise police powers to protect the homes where we rest and recover in and to protect our first responders fire stations (See Citizen Comment, May 28, 2019, Appendix 10: Firefighters Brain Study on RF Exposure and Job Functioning; Public Comment by Susan Foster FCC Docket 13-84)

There are serious consequences when humans are located in the near field of RF emissions. Links to only a few effects from the US National Library of Medicine National Institute of Health Pub Med.gov, the access source for the scientific community to peer reviewed scientific papers.

- Biological Effects from RF Radiation <https://bioinitiative.org/rf-color-charts/>
- The microwave syndrome or electro-hypersensitivity: historical background. <https://www.ncbi.nlm.nih.gov/pubmed/26556835>
- Microwave frequency EMFs produce widespread neuropsychiatric effects including depression. <https://www.ncbi.nlm.nih.gov/pubmed/26300312>
- Europaem EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses. <https://www.ncbi.nlm.nih.gov/pubmed/27454111>
- Role of Mitochondria in the Oxidative Stress Induced by EMFs: Focus on Reproductive Systems. <https://www.ncbi.nlm.nih.gov/pubmed/30533171>

**Responses to County Staff Questions of Commissioners on pg. 6 of the Memorandum August 14, 2019.**

i. Should the county provide a map of existing facilities to inform public about location of small cell facilities. (not something for the regulations but may address public comments and concerns)? **YES.**

Electro hypersensitivity (EHS) is a federally recognized disability by the U.S. Access Board since 2002 <https://smartmeterharm.files.wordpress.com/2017/01/federal-access-board-final-rule-2002.pdf>. EHS persons must know where WCFs are located, and be provided adequate notification PRIOR to their installation to take protective measures for their health and well-being. Therefore, the map maintained by the county should include existing and pending applications of WCFs, not matter the type.

ii. Should county consider periodic monitoring of radio frequency at wireless sites to ensure compliance with FCC standards? **ABSOLUTELY YES.** See Citizen Comment, May 29, 2019 pg. 21 and Appendix 4: *Industry White Paper Potential for RF Exposure Rules to Limit 5G Deployment*. These comments and the wireless industry concerns about exceeding regulatory limits for RF exposure explain the need to monitor. Pg. 21 provides the example of Syracuse, NY's MLA which put the cost of monitoring on the provider with defined consequences when found to exceed FCC limits.

b. Location and design standards. Should the county further explore setback requirements? **YES.** There are no setbacks in the ROW for residential areas. It can be as close to a bedroom window they want as long as it is on a structure in the ROW.

ii. Further review heights in various zoning districts? **Neutral**

ii. Treat Growth Management Areas differently for certain standards as suggested by Fort Collins (i.e., heights, concealed towers, landscaping)? **Neutral.**  
**Question:** Why does Fort Collins have more stringent regulations than Larimer County, and what could Larimer County learn from Fort Collins and apply in the Land Use Codes?

iv. Modify spacing or location of small cell facilities or locational preferences, such as a preference for arterials and avoidance of locating facilities on local residential streets – note there are federal limitations? **YES, ABSOLUTELY. Use your police powers** under HB 17-1193.

v. Include additional security measures such as function of cameras on towers? **NO.** In fact if cameras must be allowed for the wireless provider then strict limits on the use of the camera for non-subpoena surveillance should be enforced. 4G/5G is a backbone for a surveillance society, clearly documented in both industry, media and technical reports. We ask you to think ahead, the technology companies are way ahead of public policy. A subject for another study session.

vi. Add any other camouflage requirements or other concealment mechanisms? **NEUTRAL**

vii. Add fire protection measures for wireless facilities, for instance in the wildfire hazard area? (note: seeking input from fire districts) **ABSOLUTELY.** Cell towers catch fire every day. Vulnerable locations should be required to have their own fire suppression supplies at the WCF. Example, Poudre Canyon.

c. Review procedures – Should there be any further changes? **YES.** Combine Tables 16.A and 16.B for a clear illustration of the type of facility, the type of review (noted as “type of decision” in Table 16.B), the public notice and appeals process; please post for public comment before the Planning Commissioners meeting on September 11, 2019. As these tables seem to read now, nearly all facilities over 60’ high and located wherever are under only administrative review. Notice to the public is very limited and in many cases the public is notified after the review is complete and granted. Notice to the public should be at least 1500 ft., for all WCFs regardless if it is an adjoining property or not. Notice costs should be reimbursed by the applicant.

SITE VISITS are paramount by County staff for all WCFs. One cannot assess interruption of traffic line of site, proximity to bedroom windows or other important factors unless they go to the site. What is the training of the administrator or designee to review and approve applications? Other counties use a consultant paid for by the applicant under certain criteria. Ken Fellman serves as such a consultant for other Front Range cities, perhaps he could explain under what conditions an applicant pays for review.

d. Application and submittal requirements - Should the county request any additional information from applicants? **YES.** In the MLA pg. 11, 5.2 (5.2.2) insurance coverage should include indemnification of the County for “all future claims of harm or injury as a result of RF exposures”.

e. Are there clarifications to any other sections, or is there input regarding Master License Agreement? **YES.** The MLA is used to define many important regulatory items such as setbacks, preferred locations, installation of pole (type) and RF emissions requirements, measurements and consequences. These should be clearly spelled out in the regulations where they cannot be changed by administrative decision at a future date in the MLA.

Furthermore, the MLA should be guided by the policies determined by the Commissioners in the policy statement noted above. For example, what term do you want to put on any MLA? This is a good question for legal counsel, given the changing legal regime nationally and potentially at the state level? What period of term and what language needs to be carefully examined in the MLA to allow the County to quickly update WCFs to come into current compliance and not leave WCFs out there “grandfathered” in when laws change? Particularly as it pertains to RF exposures and environmental and health effects.

**Signage** for concealed antennas in pedestrian walkways, positions close to public seating and in parks should be required. Many frequencies have not been fully tested for interference and malfunction of certain medical devices, vulnerable populations should not sit down in near fields of antennas, pregnant women, children etc. EHS persons avoid close field RF exposures. Citizens should have the knowledge they need to make a choice on RF exposures for their own well-being. We are not aware that requiring signage for concealed antennas violates any state or federal law. In fact, the City of Berkeley required signage on the boxes for the sale of cell phones and won the case all the way to the Supreme Court. The ordinance now stands in Berkeley.

2. Do you have all the information you need to be ready to move toward the Planning Commission hearing for the draft regulations on Sept. 11?

(1) Attachment C. of the MLA pg. 3. Does the county want to prohibit the installation of new wood poles? Given the decade coming and WCFs

proliferation this would be much better aesthetically. And there is no law prohibiting your ban on new wood poles is there?

(2) Make definitions in MLA consistent with definitions in the Land Use Code.

(3) Avoid any language granting a license in perpetuity

(4) Improve public notice:

- Public notice is limited to towers higher than 60'
- Public notice is not provided until after administrative review has been approved for all other WCF applications.
- Notification for public notice is only 500 ft or to adjacent property owners depending on the type of facility. It should be 1500', and posted on the County website noted above.
- As a whole the public notice and comment during the review process is exclusionary of public comment unless it is a tower over 60' high.



Lesli Ellis &lt;ellislk@co.larimer.co.us&gt;

---

## Larimer County wireless regulations study session

---

**'Greg Temmer' v**

Wed, Aug 21, 2019 at 10:10 AM

Reply-To:

To: "

Dear Larimer County Planning Commission,

I am saddened, extremely dismayed, and in state of constant anxiety of what Larimer County will turn into with the over proliferation of antennas everywhere by the growth of small cells in Larimer County.

I have Electro-hypersensitivity (EHS) which causes me severe health issues caused by 3G, 4G, WiFi, and smart meters. My symptoms include dizziness, the inability to concentrate and think, and feeling physically anxious. In fact, I was excused from jury duty because of this issue. The Larimer County building has wireless technology everywhere in the court room, and on top of the building. This is no place to have jury trials when people need to be able to think and give the defendant a fair trial. No one can have a fair trial these days with the current configuration of the court house.

With 5G, life will get even worse and I may have to move away. You will lose my economic value to the community as a tax payer.

In this 8 minute video, Jolie Jones (daughter of singer Quincy Jones) talks about her EHS, and interviews a key researcher in the field. <https://youtu.be/SWYt2qRIGZc>  
Jolie Jones' website (<https://www.jolietalks.com>)

This is a serious issue for all of us, and any profits gained by 5G technology will have devastating health consequences and financial consequences for everyone. Any perceived profits of 5G will be a 100 fold loss in health, economic productivity, immeasurable costs, and finally death for many if not all.

I am beginning to wonder if all of you are sociopaths with absolutely no empathy or rationalism over this issue. I am also beginning to wonder if all of you are even human, and maybe you are all aliens that have plans to take over the planet Earth. You have the power to say NO to all of this. The financial issue of getting sued by Big Telecom will be nothing in comparison to the economic loss and loss to lives. Big Telecom can't possibly sue every county or city in the United States of America.

What are you going to do when Big Telecom gets sued, because all those law suits are coming. Because with all the research I have done, I see lots of conflicts of interest.

And I absolutely believe you are violating your own policies:

POLICY TYPE: GOVERNANCE PROCESS

POLICY 1.5 POLICY TITLE: BOARD MEMBERS' CODE OF CONDUCT

The Board of County Commissioners shall operate in an ethical and businesslike manner. Accordingly:

1.5.1. Members of the Board of County Commissioners must represent unconflicted

loyalty to the interests of the citizens of the entire County. This accountability supersedes any conflicting loyalty such as that to any advocacy or interest groups, or membership on other Boards or staffs. This accountability also supersedes the personal interest of any Board member acting as an individual consumer of the County government's services.

1.5.2. Members of the Board of County Commissioners must avoid any fiduciary conflict of interest, ex-parte communication or nepotism conflicts.

1.5.3. Members of the Board of County Commissioners will act in accordance with the Colorado Revised Statutes as they relate to the Board's responsibilities and authorities.

Attached is the latest scientific research of 139 Scientific Studies On How 5G Affects Health: Here are the main points that will effect everyone including all of the Planning Commision and their families. This issues are not to be taken lightly.

1. Attack our nervous systems including our brains leading to widespread neurological/neuropsychiatric effects and possibly many other effects. This nervous system attack is of great concern.
2. Attack our endocrine (that is hormonal) systems. In this context, the main things that make us functionally different from single celled creatures are our nervous system and our endocrine systems – even a simple planaria worm needs both of these. Thus the consequences of the disruption of these two regulatory systems is immense, such that it is a travesty to ignore these findings.
3. Produce oxidative stress and free radical damage, which have central roles in essentially all chronic diseases.
4. Attack the DNA of our cells, producing single strand and double strand breaks in cellular DNA and oxidized bases in our cellular DNA. These in turn produce cancer and also mutations in germ line cells which produce mutations in future generations.
5. Produce elevated levels of apoptosis (programmed cell death), events especially important in causing both neurodegenerative diseases and infertility.
6. Lower male and female fertility, lower sex hormones, lower libido and increased levels of spontaneous abortion and, as already stated, attack the DNA in sperm cells.
7. Produce excessive intracellular calcium  $[Ca^{2+}]_i$  and excessive calcium signaling.
8. Attack the cells of our bodies to cause cancer. Such attacks are thought to act via 15 different mechanisms during cancer causation.

I want to remind all of you of the Colorado Constitution from Article II, Section 3.

Section 3. *Inalienable rights.* All persons have certain natural, essential and inalienable rights, among which may be reckoned the right of enjoying and **defending their lives and liberties**; of acquiring, possessing and **protecting property**; and of **seeking and obtaining their safety and happiness**.

All this wireless stuff violates our Colorado Constitutional rights because per the other attached research article "Microwave frequency electromagnetic fields (EMFs) produce

widespread neuropsychiatric effects including depression". If microwave frequencies cause these effects, then wireless technology is making people unsafe, unhappy, and depressed than clearly our Colorado Constitutional Rights are being violated.

And finally:

Per Memorandum page 6, my preferences are the following:

Item 1. a. (i). Should the County wants to maintain a public site of all WCFs and antennas. **YES**

- Item 1. b. (iv). Modify spacing or location for small cell facilities or locations preferences such as a preference for arterials and avoidance of locating facilities on local residential streets. **YES**
- Item 1. (b) (v.) Include additional security measures such as function of cameras on towers **NO**, it is start of a surveillance backbone. In fact call for line items in the regulations or MLA that prohibit additional mounting of cameras for any surveillance.

I also request local police powers be used to:

1. keep antennas and wireless facilities away from the front of our homes and off fire stations and protect our first responders from another possible carcinogen. Firefighters have one of the highest cancer rates of any profession, need their sleep and rest. Site Appendix 10 of the Citizen Comment submitted May 28, 2019 on Susan Fosters study of firefighter performance exposed to 24.7 RF and the International Firefighters Policy on wireless radiation.
2. to create RF free parks for antenna free recreation areas for EHS.
3. to provide ADA accommodations for EHS persons to keep antennas set back safe distances from living spaces

Thank you for your attention to this important matter.

Sincerely,

Greg Temmer

---

## 2 attachments



**Neuropsychiatric effects.pdf**

342K



**5G-Risk-The-Scientific-Perspicitve.pdf**

6595K





Lesli Ellis &lt;ellislk@co.larimer.co.us&gt;

---

## Request ADA accommodation compliance in wireless regulations

---

**Cindi Peck** <c>

To: ellislk

Cc:

Mon, Aug 26, 2019 at 11:47 AM

Dear Commissioners and County Staff:

Please see the attached article about electro hypersensitivity (EHS) as a recognized disability by the ADA since 2002. It is our Citizen Comment opinion that Ken Fellman's statement was made without the recognition of EHS disabilities and the American Disability Act requiring accommodation and access to public spaces. Parks, public buildings, pedestrian walkways.

We again request that the regulations require signage on concealed antennas within 50 ft of a pedestrian walkway and outside of any publicly owned building noting the presence of RF emitting antennas. Signage is an ADA accommodation for those who have electrohypersensitivity (EHS) and for those individuals who have been advised due to a medical condition to avoid close proximity to RF emitting antennas (implanted medical devices, immune compromised, pregnant). EHS has very dramatic effects on those who suffer from it, including tachycardia and other urgent heart affects.

<https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/>

The U.S. Access Board has this publication for accommodations required by employers for persons suffering EHS.

<https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622>.

Without signage EHS persons will be left with no alternative but to file a complaint with the U.S. Access Board against the County. There is no FCC rule stating the County or any government entity cannot comply with an ADA accommodation. Standardize the sign for ADA compliance for readability and proper notice.

Thank you for your serious consideration of this request in the revision of the wireless regulations effort.

Sincerely,

**Cindi Peck**

| | |



Lesli Ellis &lt;ellislk@co.larimer.co.us&gt;

---

**Fwd: Larimer County Updates to Wireless Communication Facilities**

1 message

**Jen Cram**

To: Lesli Ellis &lt;

Tue, Aug 27, 2019 at 9:58 AM

Lesli, please see comments from Carie Dann with Loveland Fire Rescue Authority and Eric Fried on the Wireless Communication Facilities updates.

Jenn

----- Forwarded message -----

From: **Eric Fried** <

Date: Tue, Aug 20, 2019 at 2:05 PM

Subject: Re: Larimer County Updates to Wireless Communication Facilities

To: Carie Dann &lt;, Ned Sparks &lt; Jen Cram

Cc: Juan Mancha &lt;

One concern is defensible space in the Wildfire Hazard Area (WHA). These towers can be very tall and engineered and built to withstand high wind pressures, but wind-blown PG&E power lines in California sparked massive wildfires that killed lots of people and caused tremendous damage to ecosystems and buildings. Do we want to require defensible space as wide as the tower height in the WHA? Conversely, we want trees or landscaping to provide a visual buffer from neighbors. Maybe the visual buffer is more of a concern in the Front Range, which is not in the WHA, so defensible space rules don't kick in. That's one issue we need to wrestle with.

As far as Fire Separation Distance, these will mostly be Group U occupancy buildings, and Type IIB or VB construction (non-combustible or combustible, no fire-rated construction) which means per IBC Tables 601 and 602 they need to be at least 10 feet from a property line, centerline of adjoining public street/alley/public way, or imaginary line between two buildings on the lot. I assume the setback requirements, based on height, will exceed these distances anyway, so it should not be a big issue.

**Eric Fried**  
Chief Building Official

Community Development/Building Services  
200 W Oak St, Fort Collins, 80522 | 3rd Floor  
Phone: (970) 498-7705 | Fax: (970) 498-7667  
[efried@larimer.org](mailto:efried@larimer.org) | [www.larimer.org/building](http://www.larimer.org/building)

On Tue, Aug 20, 2019 at 1:35 PM Carie Dann <[Carie.Dann@lfr.org](mailto:Carie.Dann@lfr.org)> wrote:

Jen,

For #1: We're about to adopt the 2018 International Fire Code. Our code doesn't specify distance from fire stations to facilities so I have no input on that. The International Building Code has requirements in Chapter 7 for distance to lot line from the building – there are a lot of variables, so I copied Eric in case he wants to address it.

Regarding #2, if the facility includes indoor battery storage systems, Chapter 12 (Section 1206) of the IFC has very specific requirements for fire-extinguishing and fire-detection systems, contingent on types and quantities of

batteries. This is about 7.5 pages of requirements, so probably you'd just have to refer to requirements in the locally adopted IFC.

There also is a section requiring that outdoor battery storage systems (not necessarily in buildings, per se) be at least 5 feet from lot lines, public ways, buildings, etc. Not sure if that's anything you need, though.

As for WUI requirements – we won't adopt the IWUIC but we'd still review any new projects to ensure adequate vehicle access for emergency apparatus and possibly an approved water supply, if there's a Group H battery storage building or room.

Thanks for letting us respond.

**Carie Dann**

***Battalion Chief/Deputy Fire Marshal***

Loveland Fire Rescue Authority

Community Safety Division



970-962-2518 - office

970-222-7490 - cell

[www.LFRA.org](http://www.LFRA.org)

<https://twitter.com/LovelandFRA>

**From:** Jen Cram <[cramjl@co.larimer.co.us](mailto:cramjl@co.larimer.co.us)>

**Sent:** Tuesday, August 20, 2019 11:24 AM

**To:** chief1 [allensparksfire.com](mailto:chief1@allensparksfire.com) <[chief1@allensparksfire.com](mailto:chief1@allensparksfire.com)>; [scharles@berthoudfire.org](mailto:scharles@berthoudfire.org); [chief@vfdofbigelk.org](mailto:chief@vfdofbigelk.org); [chief@glenhavenfire.org](mailto:chief@glenhavenfire.org); [jjerome@estesvalleyfire.org](mailto:jjerome@estesvalleyfire.org); [chief@clvfd.org](mailto:chief@clvfd.org); Ty Drage <[tdrage@frfr.co](mailto:tdrage@frfr.co)>; Glacier 1 <[gvfdchief1@gmail.com](mailto:gvfdchief1@gmail.com)>; Livermore Fire Dept. <[livermorechief@gmail.com](mailto:livermorechief@gmail.com)>; Ned Sparks <[Ned.Sparks@lfra.org](mailto:Ned.Sparks@lfra.org)>; Carie Dann <[Carie.Dann@lfra.org](mailto:Carie.Dann@lfra.org)>; [ted.plank@pinewoodspringsfire.org](mailto:ted.plank@pinewoodspringsfire.org); [h.collins@poudrecaanyonfiredistrict.org](mailto:h.collins@poudrecaanyonfiredistrict.org); [jhowell@poudre-fire.org](mailto:jhowell@poudre-fire.org); [gjwagner@centurytel.net](mailto:gjwagner@centurytel.net); Gary Green

<[ggreen@wfpd.org](mailto:ggreen@wfpd.org)>; Everitt Pettit <[epettit@wfpd.org](mailto:epettit@wfpd.org)>; [sfriedrichsen@wsfr.us](mailto:sfriedrichsen@wsfr.us); Chris  
<[chris.brunette@state.co.us](mailto:chris.brunette@state.co.us)>; Matthew Lafferty <[mlafferty@larimer.org](mailto:mlafferty@larimer.org)>; [officers@rcvfd.org](mailto:officers@rcvfd.org);  
[chief@lyonsfire.org](mailto:chief@lyonsfire.org); Jim Lynxwiler <[jlynxwiler@poudre-fire.org](mailto:jlynxwiler@poudre-fire.org)>  
**Cc:** Lesli Ellis <[ellislk@co.larimer.co.us](mailto:ellislk@co.larimer.co.us)>; Michael Whitley <[whitlemd@co.larimer.co.us](mailto:whitlemd@co.larimer.co.us)>  
**Subject:** Larimer County Updates to Wireless Communication Facilities

We would appreciate your input on the proposed updates to the Wireless Communication Facilities section of the Land Use Code. Specifically we would appreciate your feedback on:

1. whether you have a preference or input regarding location of wireless communication facilities with regard to fire station buildings or properties, and;
2. if you think it is important to require fire protection measures for facilities in wildfire hazard areas, or in general.

Please see the link to the proposed updates below. There is also a work session with the Board of County Commissioners and Planning Commission tomorrow at 4:30 pm. The public hearing with the Planning Commission is scheduled for Wednesday, September 11. The public hearing with the Board of County Commissioners is scheduled for Monday, October 7.

Please email any comments back to me at your convenience.

We appreciate your time and input,

Jenn

<https://www.larimer.org/planning/land-use-code/proposed-amendments/wireless-regulations>

--

**Jenn Cram, AICP**

Planner II

Larimer County Community Development Division

Planning Department

[200 W. Oak Street, Fort Collins, CO](#)

970-498-7696

--

**Jenn Cram, AICP**



Lesli Ellis &lt;ellislk@co.larimer.co.us&gt;

---

## No-Safe-Level-For-Kids

---

**John Weins <**

Wed, Aug 28, 2019 at 4:29 PM

**To:**

Board of Commissioners, Planning Board, Staff:

08/no-safe-level-for-kids

*Activist Post*

August 27, 2019

(Remember, our children are our future! John Weins)

By B.N. Frank

Researchers determined decades ago

that cell phone and WiFi radiation exposure was biologically harmful. Research since then

continues to prove this . Over the years,

news reports

and warnings come and go the same way they once did with cigarettes.

Because Samsung and Apple are being sued for selling smartphones that

exceed federal RF safety limits

, this is getting renewed attention. Thanks to International Business Times

for their excellent overview of why everyone needs to be concerned about

outdated "safety" limits

and testing for all wireless devices as well as 5G .

Apple and Samsung are now facing a class-action lawsuit for their alleged risk of cancer. The complaint

stated

that the two tech giants exposed their alleged victims 500 times more than the allowable federal limit.

As per the FCC, Federal Communications Commission, a certain amount of radiation emission absorption rate is allowed per device. The Special Absorption

Rate is measured in watts of energy absorbed per kilogram of body tissue (W/kg). Through this, the government is able to measure if the device is within

allowable radiation emission or is at the rate of posing a serious risk to Apple products, Samsung products and other radiation-emitting devices.

The FCC released a standard measurement for U.S. citizens to follow in checking the amount of radiation emitted and absorbed by the human body. America

can exceed the 1.6 W/kg much lower compared to that of Europe which is 2 W/kg.

The lawsuit stated that Apple and Samsung's devices are emitting more radiation than what is tolerable by the body. After Chicago Tribune investigation,

the Apple and Samsung devices iPhone 8, iPhone X and Galaxy S8 surfaced as the types that emit more radiation bringing in the risk of genetic damages,

cellular stress, increased risk cancer risk and neurological encounter.

As of the moment, none of the Apple and Samsung users were able to claim that they have had any form of physical problems due to the radiation emission.

Instead, the ones filing the cases to our two tech giants admit that they are filing a case against the teachers for making them purchase items that could

pose a serious risk to them.

Meanwhile, 5G cell infrastructures also put the health of users at risk. 5G cell towers use shorter radio waves that will require the presence of more

cell sites as each site can only provide limited coverage.

Dr. Martin Paul [sic], Professor Emeritus of Biochemistry at Washington State University said that 5G is indeed a threat to the public. He also specified

some known illness that could accompany the 5G presence, reproductive damage, cardiac effects and oxidative stress, which can be accelerated.

block quote end

Register Now for The 5G Crisis: Awareness & Accountability Summit. Online and

FREE from August 26 – September 1, 2019 .

Photo image of

Democracy Now!

574K subscribers

How the Wireless Industry Convinced the Public Cellphones Are Safe & Cherry-Picked Research on Risks

Watch later Share

Play

08/Brave500

Brave - The Browser Built for Privacy

Photo image of

CBC News

1.4M subscribers

The secret inside your cellphone (CBC Marketplace)

Watch later Share

Play

Photo image of

Michigan Safe Technology

801 subscribers

Dr. Sharon Goldberg Testifies at Michigan's 5G Small Cell Tower Legislation Hearing October 4, 2018

Watch later Share

Play

Activist Post reports regularly about illnesses

caused by exposure to all sources of Electromagnetic Radiation (

Electrosmog) and all risks associated with the "Race for 5G

." For more information,

visit our archives and the following websites:

list of 19 items

■

Americans for Responsible Technology

- 

5GCrisis

- 

5GExposed

- 

5G Information

- 

Center For Safer Wireless

- 

Ecological Options Network

- 

ElectromagneticHealth

- 

Electromagnetic Radiation Safety

- 

EMF Safety Network

- 

Environmental Health Trust



■

Generation Zapped

■

Parents for Safe Technology

■

Physicians for Safe Technology

■

TelecomPowerGrab.org

■

The People's Initiative

■

We Are The Evidence

■

Whatis5G.Info

■

Wireless Information Network

■

## Commissioner Kefalas – Additional Input Concerning Proposed WCF LUC Updates – August 28, 2019

- Policy statement allowing historical and environmental reviews of WCF applications.
- Signage that is compliant with ADA requirements for people with ESH (electro hypersensitivity), which presumably is a disability subject to ADA; if this is the case and we base signage decisions on this, does industry still have grounds to sue the county?
- Provide a map of existing facilities to inform public about location of small cell facilities; update this map periodically.
- Further explore setback requirements from people's homes related to small cell facilities; modify spacing or location of small cell facilities or location preferences – preference for arterials over residential streets – within federal limitations.
- Incentivize better quality camouflage requirements or other concealment mechanisms.
- Add fire protection measures for WCFs especially in the WUI.
- Ensure MLA provisions that permit WCFs in ROW are clearly spelled out with design standards in Section 16.1.4; ensure that MLAs are clear and concise regarding responsibilities and requirements of provider and county; MLA should include review and renewal provision.

### Section 16.1.1

- Statement #2: change to “promote public safety and welfare.”
- Statements #6 and #8: include small cell facilities.

### Section 16.1.2

- Add “subject to future federal and state law.”

### Section 16.1.3

- Make the two tables in the LUC more user-friendly – review processes and zoning districts where WCFs allowed – perhaps some kind of cross reference to LUC or a flow chart for applicant and public understanding.
- Expand mail notification to 1000' rather than 500'; all notices including SP at time of application rather than after administrative decision made.

### Section 16.1.6 and 16.1.7

- Remove 2a “Small cell facilities shall be a permitted use by right in county ROW subject to review and approval from the county.” Do you agree with Cindi Peck's interpretation?
- Include site visits by planning staff as part of the application and review process.
- Add provision for compliance report

### Section 16.1.8

- Ensure that all definitions are included in definition section – including terms referenced in MLA.



Lesli Ellis &lt;ellislk@co.larimer.co.us&gt;

---

## Planning Commissioner homework re Small Cell

---

**Anne Johnson** <pcboardmember3@co.larimer.co.us>

Sat, Aug 24, 2019 at 3:00 PM

To: Lesli Ellis &lt;ellislk@larimer.org&gt;, Sean Dougherty &lt;pcboardmember8@co.larimer.co.us&gt;

Ms. Ellis and Chair Dougherty,

Below are answers to questions that we didn't get to during the work session. We were asked to provide input back to you over the weekend. See responses to questions below and suggested inclusion based on our informative work session.

Sincerely,  
Anne

Several -Should the county provide a map? A GIS map could be a layer on the existing County GIS mapping system

Should the county consider periodic monitoring of wireless sights in regards to RF? Since there appears to be questions about safety, can we ask the applicant to submit annual reporting. I understand this may be a biased report. Could the applicant be required to pay for an annual third-party assessment?

Explore setback requirements - Setback/offset requirements should be a criteria of approval. I don't have the background necessary to propose appropriate setbacks/offsets.

Heights - How were the heights proposed determined?

Growth management areas - A referral should be provided to communities when the proposal is in the GMA. See comment regarding setbacks/offsets above.

Modify spacing and avoid locating on residential streets? Are there options for residential areas - on corners or in boulevards?

Include additional security measures such as cameras? Co-location of additional technology is a great opportunity. Weather sensors, cameras, etc. would be great where the need presents itself. For example, the young woman who disappeared in Longmont a few years ago disappeared from an area that didn't have camera surveillance coverage. In densely populated areas, downtown, etc., having camera coverage may be a great idea.

Camouflage? Use colors or architectural elements as appropriate.

Fire protection? Is this needed?

MLA input - add SHPO and Environmental agency (CPW) as a referral to MLA as well as 'other' applications. MLA should contain Conditions of Approval/Criteria of Approval as well as standing Development Standards to clearly communicate development expectations.

Signage - I am neutral about signage.

Other - Annual compliance/reporting is needed. This will help identify when a site is no longer active and afford staff the ability to request a facility's removal. Could a bond be posted to cover removal of abandoned

sites in the event a company is not responsive? The County would be prudent to consider how to track abandoned sites and the cost to remove equipment.

# Q1 Do you have general suggestions about the direction of the Wireless Communication Facility Regulations? Please provide detailed suggestions under the relevant sections below.

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	<p>a) Require signage on concealed antennas within 50 ft of a pedestrian walkway and outside of any publicly owned building noting the presence of RF emitting antennas. Signage is an ADA accommodation for those who have electrohypersensitivity (EHS) and for those individuals who have been advised due to a medical condition to avoid close proximity to RF emitting antennas (implanted medical devices, immune compromised, pregnant). EHS is a recognized disability by the U.S. Access Board since 2002 and has very dramatic effects on those who suffer from it. <a href="https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/">https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/</a> The U.S. Access Board has this publication for accommodations required by employers for persons suffering EHS. <a href="https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622">https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622</a> Without signage EHS persons will be left with no alternative but to file a complaint with the U.S. Access Board against the County. There is no FCC rule stating the County or any government entity cannot comply with ADA accommodation. Standardize the sign for ADA compliance. (b). In response to staff memo items for the Joint Study session for the Commissioners, the following is public comment on each item staff questioned not in the detailed response by section below. i. Should the county provide a map of existing facilities to inform public about location of small cell facilities. (not something for the regulations but may address public comments and concerns)? YES. Should county consider periodic monitoring of radio frequency at wireless sites to ensure compliance with FCC standards? ABSOLUTELY YES. See Citizen Comment, May 29, 2019 pg. 21 and Appendix 4: Industry White Paper Potential for RF Exposure Rules to Limit 5G Deployment. These comments and the wireless industry concerns about exceeding regulatory limits for RF exposure explain the need to monitor. Pg. 21 provides the example of Syracuse, NY's MLA which put the cost of monitoring on the provider with defined consequences when found to exceed FCC limits. Include additional security measures such as function of cameras on towers? NO. In fact if cameras must be allowed for the wireless provider then strict limits on the use of the camera for non-subpoena surveillance should be enforced. 4G/5G is a backbone for a surveillance society, clearly documented in both industry, media and technical reports. We ask you to think ahead, the technology companies are way ahead of public policy. A subject for another study session. vii. Add fire protection measures for wireless facilities, for instance in the wildfire hazard area? (note: seeking input from fire districts) ABSOLUTELY. Cell towers catch fire every day. Vulnerable locations should be required to have their own fire suppression supplies at the WCF. Example, Poudre Canyon.</p>	8/28/2019 11:35 AM
2	<p>Require Telecom to require testing. 5G testing equipment is not readily available; make telecom company test upon instantiation as well as interactively, and yearly and submit annual reports to the county. The more towers that are allowed in the more radiation will be put out into our environment to hold. They have to do testing to account for the towers coming in. we already know that too much radiation is cause for health concern.</p>	8/28/2019 9:29 AM

## Wireless Communication Facilities regulations

3	<p>a) Require signage on concealed antennas within 50 ft of a pedestrian walkway and outside of any publicly owned building noting the presence of RF emitting antennas. Signage is an ADA accommodation for those who have electrohypersensitivity (EHS) and for those individuals who have been advised due to a medical condition to avoid close proximity to RF emitting antennas (implanted medical devices, immune compromised, pregnant). EHS is a recognized disability by the U.S. Access Board since 2002 and has very dramatic effects on those who suffer from it. <a href="https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/">https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/</a> The U.S. Access Board has this publication for accommodations required by employers for persons suffering EHS. <a href="https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622">https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622</a> Without signage EHS persons will be left with no alternative but to file a complaint with the U.S. Access Board against the County. There is no FCC rule stating the County or any government entity cannot comply with ADA accommodation. Standardize the sign for ADA compliance. (b). In response to staff memo items for the Joint Study session for the Commissioners, the following is public comment on each item staff questioned not in the detailed response by section below. i. Should the county provide a map of existing facilities to inform public about location of small cell facilities. (not something for the regulations but may address public comments and concerns)? YES. Should county consider periodic monitoring of radio frequency at wireless sites to ensure compliance with FCC standards? ABSOLUTELY YES. See Citizen Comment, May 29, 2019 pg. 21 and Appendix 4: Industry White Paper Potential for RF Exposure Rules to Limit 5G Deployment. These comments and the wireless industry concerns about exceeding regulatory limits for RF exposure explain the need to monitor. Pg. 21 provides the example of Syracuse, NY's MLA which put the cost of monitoring on the provider with defined consequences when found to exceed FCC limits. Include additional security measures such as function of cameras on towers? NO. In fact if cameras must be allowed for the wireless provider then strict limits on the use of the camera for non-subpoena surveillance should be enforced. 4G/5G is a backbone for a surveillance society, clearly documented in both industry, media and technical reports. We ask you to think ahead, the technology companies are way ahead of public policy. A subject for another study session. vii. Add fire protection measures for wireless facilities, for instance in the wildfire hazard area? (note: seeking input from fire districts) ABSOLUTELY. Cell towers catch fire every day. Vulnerable locations should be required to have their own fire suppression supplies at the WCF. Example, Poudre Canyon.</p>	8/28/2019 5:47 AM
4	<p>a) Require signage on concealed antennas within 50 ft of a pedestrian walkway and outside of any publicly owned building noting the presence of RF emitting antennas. Signage is an ADA accommodation for those who have electrohypersensitivity (EHS) and for those individuals who have been advised due to a medical condition to avoid close proximity to RF emitting antennas (implanted medical devices, immune compromised, pregnant). EHS is a recognized disability by the U.S. Access Board since 2002 and has very dramatic effects on those who suffer from it. <a href="https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/">https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/</a> The U.S. Access Board has this publication for accommodations required by employers for persons suffering EHS. <a href="https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622">https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622</a> Without signage EHS persons will be left with no alternative but to file a complaint with the U.S. Access Board against the County. There is no FCC rule stating the County or any government entity cannot comply with ADA accommodation. Standardize the sign for ADA compliance. (b). In response to staff memo items for the Joint Study session for the Commissioners, the following is public comment on each item staff questioned not in the detailed response by section below. i. Should the county provide a map of existing facilities to inform public about location of small cell facilities. (not something for the regulations but may address public comments and concerns)? YES. Should county consider periodic monitoring of radio frequency at wireless sites to ensure compliance with FCC standards? ABSOLUTELY YES. See Citizen Comment, May 29, 2019 pg. 21 and Appendix 4: Industry White Paper Potential for RF Exposure Rules to Limit 5G Deployment. These comments and the wireless industry concerns about exceeding regulatory limits for RF exposure explain the need to monitor. Pg. 21 provides the example of Syracuse, NY's MLA which put the cost of monitoring on the provider with defined consequences when found to exceed FCC limits. Include additional security measures such as function of cameras on towers? NO. In fact if cameras must be allowed for the wireless provider then strict limits on the use of the camera for non-subpoena surveillance should be enforced. 4G/5G is a backbone for a surveillance society, clearly documented in both industry, media and technical reports. We ask you to think ahead, the technology companies are way ahead of public policy. A subject for another study session. vii. Add fire protection measures for wireless facilities, for instance in the wildfire hazard area? (note: seeking input from fire districts) ABSOLUTELY. Cell towers catch fire every day. Vulnerable locations should be required to have their own fire suppression supplies at the WCF. Example, Poudre Canyon.</p>	8/27/2019 3:55 PM
5	<p>Current phones run at 2.4 GHZ Microwaves run at 2.45 GHZ. 30-300 is outrageously unsafe. This is like opening a microwave and leaving it on forever (at a much more intense level). Please don't allow us to be the guinea pigs &lt;3</p>	8/27/2019 12:40 PM

## Wireless Communication Facilities regulations

6	<p>These comments are detailed because they have not place in the other questions below. a) Require signage on concealed antennas within 50 ft of a pedestrian walkway and outside of any publicly owned building noting the presence of RF emitting antennas. Signage is an ADA accommodation for those who have electrohypersensitivity (EHS) and for those individuals who have been advised due to a medical condition to avoid close proximity to RF emitting antennas (implanted medical devices, immune compromised, pregnant). EHS is a recognized disability by the U.S. Access Board since 2002 and has very dramatic effects on those who suffer from it. <a href="https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/">https://scientists4wiredtech.com/what-are-4g-5g/electromagnetic-sensitivity/</a> The U.S. Access Board has this publication for accommodations required by employers for persons suffering EHS. <a href="https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622">https://askjan.org/publications/Disability-Downloads.cfm?pubid=226622</a> Without signage EHS persons will be left with no alternative but to file a complaint with the U.S. Access Board against the County. There is no FCC rule stating the County or any government entity cannot comply with ADA accommodation. Standardize the sign for ADA compliance. (b). In response to staff memo items for the Joint Study session for the Commissioners, the following is public comment on each item staff questioned not in the detailed response by section below. i. Should the county provide a map of existing facilities to inform public about location of small cell facilities. (not something for the regulations but may address public comments and concerns)? YES. Should county consider periodic monitoring of radio frequency at wireless sites to ensure compliance with FCC standards? ABSOLUTELY YES. See Citizen Comment, May 29, 2019 pg. 21 and Appendix 4: Industry White Paper Potential for RF Exposure Rules to Limit 5G Deployment. These comments and the wireless industry concerns about exceeding regulatory limits for RF exposure explain the need to monitor. Pg. 21 provides the example of Syracuse, NY's MLA which put the cost of monitoring on the provider with defined consequences when found to exceed FCC limits. Include additional security measures such as function of cameras on towers? NO. In fact if cameras must be allowed for the wireless provider then strict limits on the use of the camera for non-subpoena surveillance should be enforced. 4G/5G is a backbone for a surveillance society, clearly documented in both industry, media and technical reports. We ask you to think ahead, the technology companies are way ahead of public policy. A subject for another study session. vii. Add fire protection measures for wireless facilities, for instance in the wildfire hazard area? (note: seeking input from fire districts) ABSOLUTELY. Cell towers catch fire every day. Vulnerable locations should be required to have their own fire suppression supplies at the WCF. Example, Poudre Canyon.</p>	8/25/2019 7:24 AM
---	--	-------------------

## Q2 Do you have detailed suggestions to add, remove or modify anything in Section 16.1.1 - Intent and Purpose?

Answered: 6   Skipped: 0

#	RESPONSES	DATE
1	<p>Remove the portion of statement 2. "Promote and Protect the public health, state only to promote the safety and welfare... you are prohibited by FCC rules to protect our health. Items 6 and Items 8, add to towers, antennas and WCFs. County should prepare a policy statement to guide the intent going forward in a rapidly changing legal regime acknowledging public concern for health and property values in the siting of WCFs. Include OTARDs in the regulations, as the technology and an FCC docket under consideration plans are to allow OTARDs to be transmitting antennas. Include at a minimum notice that concealed antennas on private property such as a steeple in a church be required to be registered with the County for public posting on the proposed map of existing facilities to inform public about locations of WCFs. In that public proposed public map, include pending applications. (See staff memorandum pg 6 1. (a.) i.). Do not exclude from RF emission measurement and monitoring requirements proposed by the public comment special events page 2, 3. (e.) Sudden and high heating exposure to RF limits exceeding FCC guidelines can be cause permanent damage to a person. At no time under any condition should RF FCC limits be exceeded</p>	8/28/2019 11:35 AM
2	<p>enhance the ability to provide wired broad band services to county residents, business, and visitors as well as wireless options. promote location of CMRS facilities on existing towers that are deemed safe to public health. (B)create a process to obtain necessary permits for CMRS facilities that leaves no loopholes to receive a permit for a location that isn't protecting the legitimate interests of county residents. If we shorten the process and speed up something that hasn't been tested could become more of a danger.</p>	8/28/2019 9:29 AM

## Wireless Communication Facilities regulations

3	Remove the portion of statement 2. "Promote and Protect the public health, state only to promote the safety and welfare... you are prohibited by FCC rules to protect our health. Items 6 and Items 8, add to towers, antennas and WCFs. County should prepare a policy statement to guide the intent going forward in a rapidly changing legal regime acknowledging public concern for health and property values in the siting of WCFs. Include OTARDs in the regulations, as the technology and an FCC docket under consideration plans are to allow OTARDs to be transmitting antennas. Include at a minimum notice that concealed antennas on private property such as a steeple in a church be required to be registered with the County for public posting on the proposed map of existing facilities to inform public about locations of WCFs. In that public proposed public map, include pending applications. (See staff memorandum pg 6 1. (a.) i.). Do not exclude from RF emission measurement and monitoring requirements proposed by the public comment special events page 2, 3. (e.) Sudden and high heating exposure to RF limits exceeding FCC guidelines can be cause permanent damage to a person. At no time under any condition should RF FCC limits be exceeded.	8/28/2019 5:47 AM
4	Remove the portion of statement 2. "Promote and Protect the public health, state only to promote the safety and welfare... you are prohibited by FCC rules to protect our health. Items 6 and Items 8, add to towers, antennas and WCFs. County should prepare a policy statement to guide the intent going forward in a rapidly changing legal regime acknowledging public concern for health and property values in the siting of WCFs. Include OTARDs in the regulations, as the technology and an FCC docket under consideration plans are to allow OTARDs to be transmitting antennas. Include at a minimum notice that concealed antennas on private property such as a steeple in a church be required to be registered with the County for public posting on the proposed map of existing facilities to inform public about locations of WCFs. In that public proposed public map, include pending applications. (See staff memorandum pg 6 1. (a.) i.). Do not exclude from RF emission measurement and monitoring requirements proposed by the public comment special events page 2, 3. (e.) Sudden and high heating exposure to RF limits exceeding FCC guidelines can be cause permanent damage to a person. At no time under any condition should RF FCC limits be exceeded.	8/27/2019 3:55 PM
5	It is assault and trespassing to force this upon people (by the very definitions).	8/27/2019 12:40 PM
6	Remove the portion of statement 2. "Promote and Protect the public health, state only to promote the safety and welfare... you are prohibited by FCC rules to protect our health. Items 6 and Items 8, add to towers, antennas and WCFs. County should prepare a policy statement to guide the intent going forward in a rapidly changing legal regime acknowledging public concern for health and property values in the siting of WCFs. Include OTARDs in the regulations, as the technology and an FCC docket under consideration plans are to allow OTARDs to be transmitting antennas. Include at a minimum notice that concealed antennas on private property such as a steeple in a church be required to be registered with the County for public posting on the proposed map of existing facilities to inform public about locations of WCFs. In that public proposed public map, include pending applications. (See staff memorandum pg 6 1. (a.) i.). Do not exclude from RF emission measurement and monitoring requirements proposed by the public comment special events page 2, 3. (e.) Sudden and high heating exposure to RF limits exceeding FCC guidelines can be cause permanent damage to a person. At no time under any condition should RF FCC limits be exceeded.	8/25/2019 7:24 AM

### Q3 Do you have detailed suggestions to add, remove or modify anything in Section 16.1.2 – Where allowed?

Answered: 6   Skipped: 0

#	RESPONSES	DATE
1	16.1.2 add subject to future federal and state law in the first paragraph.	8/28/2019 11:35 AM
2	Require notification by Telecom to Businesses and residents within 3,000 feet of a tower via registered letter. Not permitted on public or private school grounds. these microwaves are dangers to human health and some people have EMF wave sensitivities. Please never allow this in our schools.	8/28/2019 9:29 AM
3	16.1.2 add subject to future federal and state law in the first paragraph.	8/28/2019 5:47 AM



## Wireless Communication Facilities regulations

4	16.1.2 add subject to future federal and state law in the first paragraph.	8/27/2019 3:55 PM
5	Please do not allow millimeter wave technology. Current 4G antennas are on waves with large crests and troughs. Millimeter waves have millimeter-sized crests and troughs which would be incredibly intense for any living organism. 5G antennas are nothing like 4G antennas. Please do not allow 5G antennas anywhere around living organisms.	8/27/2019 12:40 PM
6	16.1.2 add subject to future federal and state law in the first paragraph.	8/25/2019 7:24 AM

### Q4 Do you have detailed suggestions to add, remove or modify anything Section 16.1.3 – Operational Standards for all WCFs?

Answered: 6    Skipped: 0

#	RESPONSES	DATE
1	<p>16.1.3 B. Details of operational standards for WCFs are really located in the Master License Agreement, which was not subject to public comment on this survey. MLAs must not grant licenses beyond five years with an annual renewal each five years subject to federal and state laws. MLA must require applicant comply with RF emissions and have remedies for non-compliance as quickly as possible to keep the public safe. The County can monitor RF emissions and provide consequences for exceeding RF emission limits just as Syracuse, NY did in their MLA and as other local governments have done. The FCC has no monitoring compliance resource and has stated so on their website. The FCC rules do not prohibit local governments from enforcing the FCC standards of RF limits. There is nothing that prohibits the County from requiring monitoring of RF emissions, citizen complaints of WCFs exceeding RF limits with approved test methods and the County imposing consequences. Table 16.A references Table 16.B. But the two combined really tell the allowed places, the full description of the type of facility, the application process or shot clock, public notice, approval and appeals process. While these tables could remain in their appropriate sections, there is a need for a flow chart for applicant and public understanding of allowed zones, type of facility, application and review process and appeals. Table 16.B has inadequate and late public notice after an administrative approval. Public notice would be improved by the construction of a form required in the application describing the location by address, type of facility, shot clock deadlines and date of expected installment. This form could then easily allow county staff to create the map of applications and sited WCFs as proposed in the Staff Memorandum pg.6.(a).i. Whether the county feels the public has any right to act upon an application does not preclude their right to know as quickly as possible. NOT AFTER administrative review. ADD site visits for all types of WCFs by staff. Table 16.B public notice should be modified to state "at application for all SP, PSP, MS and SR. Public notice required by mail subject to appeals should extend to 1500' not adjacent property owners or 500'. There are no site visits at this time in any review applications. How will the County know if a WCF or tower blocks ADA access, line of site traffic or is within 100 ft of the foundation of someone's home? Be sure it is clear that any provider using the MLA to install on existing traffic signal or other infrastructure comply with notice to county exactly where and what type of equipment so the County can keep the map proposed for applications of WCFs and siting of WCFs current.</p>	8/28/2019 11:35 AM
2	<p>Do NOT differentiate private property tower installations vs. public tower installations. They MUST all abide by the same space limitations. Otherwise we will end up with towers within feet of one another or even on the same block. they may end up removing trees to set up these towers. CMRS facilities may not be placed on any residential properties no matter what type of antenna it is. These antennas carry the EMF radiation and are harmful.</p>	8/28/2019 9:29 AM

## Wireless Communication Facilities regulations

3	<p>16.1.3 B. Details of operational standards for WCFs are really located in the Master License Agreement, which was not subject to public comment on this survey. MLAs must not grant licenses beyond five years with an annual renewal each five years subject to federal and state laws. MLA must require applicant comply with RF emissions and have remedies for non-compliance as quickly as possible to keep the public safe. The County can monitor RF emissions and provide consequences for exceeding RF emission limits just as Syracuse, NY did in their MLA and as other local governments have done. The FCC has no monitoring compliance resource and has stated so on their website. The FCC rules do not prohibit local governments from enforcing the FCC standards of RF limits. There is nothing that prohibits the County from requiring monitoring of RF emissions, citizen complaints of WCFs exceeding RF limits with approved test methods and the County imposing consequences. Table 16.A references Table 16.B. But the two combined really tell the allowed places, the full description of the type of facility, the application process or shot clock, public notice, approval and appeals process. While these tables could remain in their appropriate sections, there is a need for a flow chart for applicant and public understanding of allowed zones, type of facility, application and review process and appeals. Table 16.B has inadequate and late public notice after an administrative approval. Public notice would be improved by the construction of a form required in the application describing the location by address, type of facility, shot clock deadlines and date of expected installment. This form could then easily allow county staff to create the map of applications and sited WCFs as proposed in the Staff Memorandum pg.6.(a).i. Whether the county feels the public has any right to act upon an application does not preclude their right to know as quickly as possible. NOT AFTER administrative review. ADD site visits for all types of WCFs by staff. Table 16.B public notice should be modified to state "at application for all SP, PSP, MS and SR. Public notice required by mail subject to appeals should extend to 1500' not adjacent property owners or 500'. There are no site visits at this time in any review applications. How will the County know if a WCF or tower blocks ADA access, line of site traffic or is within 100 ft of the foundation of someone's home? Be sure it is clear that any provider using the MLA to install on existing traffic signal or other infrastructure comply with notice to county exactly where and what type of equipment so the County can keep the map proposed for applications of WCFs and siting of WCFs current.</p>	8/28/2019 5:47 AM
4	<p>16.1.3 B. Details of operational standards for WCFs are really located in the Master License Agreement, which was not subject to public comment on this survey. MLAs must not grant licenses beyond five years with an annual renewal each five years subject to federal and state laws. MLA must require applicant comply with RF emissions and have remedies for non-compliance as quickly as possible to keep the public safe. The County can monitor RF emissions and provide consequences for exceeding RF emission limits just as Syracuse, NY did in their MLA and as other local governments have done. The FCC has no monitoring compliance resource and has stated so on their website. The FCC rules do not prohibit local governments from enforcing the FCC standards of RF limits. There is nothing that prohibits the County from requiring monitoring of RF emissions, citizen complaints of WCFs exceeding RF limits with approved test methods and the County imposing consequences. Table 16.A references Table 16.B. But the two combined really tell the allowed places, the full description of the type of facility, the application process or shot clock, public notice, approval and appeals process. While these tables could remain in their appropriate sections, there is a need for a flow chart for applicant and public understanding of allowed zones, type of facility, application and review process and appeals. Table 16.B has inadequate and late public notice after an administrative approval. Public notice would be improved by the construction of a form required in the application describing the location by address, type of facility, shot clock deadlines and date of expected installment. This form could then easily allow county staff to create the map of applications and sited WCFs as proposed in the Staff Memorandum pg.6.(a).i. Whether the county feels the public has any right to act upon an application does not preclude their right to know as quickly as possible. NOT AFTER administrative review. ADD site visits for all types of WCFs by staff. Table 16.B public notice should be modified to state "at application for all SP, PSP, MS and SR. Public notice required by mail subject to appeals should extend to 1500' not adjacent property owners or 500'. There are no site visits at this time in any review applications. How will the County know if a WCF or tower blocks ADA access, line of site traffic or is within 100 ft of the foundation of someone's home? Be sure it is clear that any provider using the MLA to install on existing traffic signal or other infrastructure comply with notice to county exactly where and what type of equipment so the County can keep the map proposed for applications of WCFs and siting of WCFs current.</p>	8/27/2019 3:55 PM
5	<p>PPlease do not allow millimeter wave technology. Current 4G antennas are on waves with large crests and troughs. Millimeter waves have millimeter-sized crests and troughs which would be incredibly intense for any living organism. 5G antennas are nothing like 4G antennas. Please do not allow 5G antennas anywhere around living organisms.</p>	8/27/2019 12:40 PM

6	<p>16.1.3 B. Details of operational standards for WCFs are really located in the Master License Agreement, which was not subject to public comment on this survey. MLAs must not grant licenses beyond five years with an annual renewal each five years subject to federal and state laws. MLA must require applicant comply with RF emissions and have remedies for non-compliance as quickly as possible to keep the public safe. The County can monitor RF emissions and provide consequences for exceeding RF emission limits just as Syracuse, NY did in their MLA and as other local governments have done. The FCC has no monitoring compliance resource and has stated so on their website. The FCC rules do not prohibit local governments from enforcing the FCC standards of RF limits. There is nothing that prohibits the County from requiring monitoring of RF emissions, citizen complaints of WCFs exceeding RF limits with approved test methods and the County imposing consequences. Table 16.A references Table 16.B. But the two combined really tell the allowed places, the full description of the type of facility, the application process or shot clock, public notice, approval and appeals process. While these tables could remain in their appropriate sections, there is a need for a flow chart for applicant and public understanding of allowed zones, type of facility, application and review process and appeals. Table 16.B has inadequate and late public notice after an administrative approval. Public notice would be improved by the construction of a form required in the application describing the location by address, type of facility, shot clock deadlines and date of expected installment. This form could then easily allow county staff to create the map of applications and sited WCFs as proposed in the Staff Memorandum pg.6.(a).i. Whether the county feels the public has any right to act upon an application does not preclude their right to know as quickly as possible. NOT AFTER administrative review. ADD site visits for all types of WCFs by staff. Table 16.B public notice should be modified to state "at application for all SP, PSP, MS and SR. Public notice required by mail subject to appeals should extend to 1500' not adjacent property owners or 500'. There are no site visits at this time in any review applications. How will the County know if a WCF or tower blocks ADA access, line of site traffic or is within 100 ft of the foundation of someone's home? Be sure it is clear that any provider using the MLA to install on existing traffic signal or other infrastructure comply with notice to county exactly where and what type of equipment so the County can keep the map proposed for applications of WCFs and siting of WCFs current.</p>	8/25/2019 7:24 AM
---	--	-------------------

**Q5 Do you have detailed suggestions to add, remove or modify anything in Section 16.1.4 – Design Standards for all WCFs or Towers? (Note: comments specific to small cell facilities are in the next question.)**

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	No new wooden poles. 600' apart, and we will have stickville. Sadly, the setbacks are only for towers and do not apply to WCFs, which is a lot of equipment configurations. And they do not apply to the public right of way, so no setbacks from bedroom windows where we sleep. Use your police powers to protect our homes where we sleep and recover. Use setbacks to protect our firefighters, keep all WCFs off their stations.	8/28/2019 11:35 AM
2	All towers must be retested when the outdated 1996 FCC regulations/FDA/EPA regulations changed. If the towers do not pass they must be removed or mitigated by the Telecom industry within 30 days or be fined.	8/28/2019 9:29 AM
3	No new wooden poles. 600' apart, and we will have stickville. Sadly, the setbacks are only for towers and do not apply to WCFs, which is a lot of equipment configurations. And they do not apply to the public right of way, so no setbacks from bedroom windows where we sleep. Use your police powers to protect our homes where we sleep and recover. Use setbacks to protect our firefighters, keep all WCFs off their stations.	8/28/2019 5:47 AM
4	No new wooden poles. 600' apart, and we will have stickville. Sadly, the setbacks are only for towers and do not apply to WCFs, which is a lot of equipment configurations. And they do not apply to the public right of way, so no setbacks from bedroom windows where we sleep. Use your police powers to protect our homes where we sleep and recover. Use setbacks to protect our firefighters, keep all WCFs off their stations.	8/27/2019 3:55 PM

## Wireless Communication Facilities regulations

5	Please do not allow millimeter wave technology. Current 4G antennas are on waves with large crests and troughs. Millimeter waves have millimeter-sized crests and troughs which would be incredibly intense for any living organism. 5G antennas are nothing like 4G antennas. Please do not allow 5G antennas anywhere around living organisms.	8/27/2019 12:40 PM
6	No new wooden poles. 600' apart, and we will have stickville. Sadly, the setbacks are only for towers and do not apply to WCFs, which is a lot of equipment configurations. And they do not apply to the public right of way, so no setbacks from bedroom windows where we sleep. Use your police powers to protect our homes where we sleep and recover. Use setbacks to protect our firefighters, keep all WCFs off their stations.	8/25/2019 7:24 AM

### Q6 Do you have detailed suggestions to add, remove or modify anything in Section 16.1.4 – Design Standards specific to Small Cell Facilities?

Answered: 6   Skipped: 0

#	RESPONSES	DATE
1	50dB of noise is very high. Given the prolific numbers of these facilities and considering this noise level is like a bathroom fan or a dishwasher running too high. If these WCFs are outside a home on a light post for 24/7 the dB allowed is too high for residential neighborhoods. It destroys the peace and quiet of the neighborhood. Lower for all WCFs to 10dB. Citizen Comments on May 29, 2019 and for the Joint Study Session of Commissioners on August 21, 2019 repeatedly asked the County to use all powers to set setbacks from our homes. The setbacks do not exist for WCFs in the public ROW and thus we are subject to WCFs outside our bedroom windows. We ask if police powers would allow setbacks from homes.	8/28/2019 11:35 AM
2	They should only be allowed after the testing is required and shows will not do harm to the environment and the people of the community. do not allow temporary small cell facilities unless testing shows safe.	8/28/2019 9:29 AM
3	50dB of noise is very high. Given the prolific numbers of these facilities and considering this noise level is like a bathroom fan or a dishwasher running too high. If these WCFs are outside a home on a light post for 24/7 the dB allowed is too high for residential neighborhoods. It destroys the peace and quiet of the neighborhood. Lower for all WCFs to 10dB. Citizen Comments on May 29, 2019 and for the Joint Study Session of Commissioners on August 21, 2019 repeatedly asked the County to use all powers to set setbacks from our homes. The setbacks do not exist for WCFs in the public ROW and thus we are subject to WCFs outside our bedroom windows. We ask if police powers would allow setbacks from homes.	8/28/2019 5:47 AM
4	50dB of noise is very high. Given the prolific numbers of these facilities and considering this noise level is like a bathroom fan or a dishwasher running too high. If these WCFs are outside a home on a light post for 24/7 the dB allowed is too high for residential neighborhoods. It destroys the peace and quiet of the neighborhood. Lower for all WCFs to 10dB. Citizen Comments on May 29, 2019 and for the Joint Study Session of Commissioners on August 21, 2019 repeatedly asked the County to use all powers to set setbacks from our homes. The setbacks do not exist for WCFs in the public ROW and thus we are subject to WCFs outside our bedroom windows. We ask if police powers would allow setbacks from homes.	8/27/2019 3:55 PM
5	Please do not allow millimeter wave technology. Current 4G antennas are on waves with large crests and troughs. Millimeter waves have millimeter-sized crests and troughs which would be incredibly intense for any living organism. 5G antennas are nothing like 4G antennas. Please do not allow 5G antennas (small cell) anywhere around living organisms.	8/27/2019 12:40 PM
6	50dB of noise is very high. Given the prolific numbers of these facilities and considering this noise level is like a bathroom fan or a dishwasher running too high. If these WCFs are outside a home on a light post for 24/7 the dB allowed is too high for residential neighborhoods. It destroys the peace and quiet of the neighborhood. Lower for all WCFs to 10dB. Citizen Comments on May 29, 2019 and for the Joint Study Session of Commissioners on August 21, 2019 repeatedly asked the County to use all powers to set setbacks from our homes. The setbacks do not exist for WCFs in the public ROW and thus we are subject to WCFs outside our bedroom windows. We ask if police powers would allow setbacks from homes.	8/25/2019 7:24 AM

## Q7 Do you have detailed suggestions to add, remove or modify anything in Section 16.1.5 – Administrative Waiver?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	What is the proof required by the applicant that the design standard prohibits or has the effect of prohibiting the provision of wireless service through the WCF at the location? It was conveyed as long as the standards are published ahead of time they are legal. What standards will you apply to a claim that the design standards prohibit the provision of wireless service through a WCF? Who at the county is trained to know if the claim by an applicant is true? What will the County do to staff this with the technical expertise required?	8/28/2019 11:35 AM
2	proof that this won't cause harm to our environment and the people of the county.	8/28/2019 9:29 AM
3	What is the proof required by the applicant that the design standard prohibits or has the effect of prohibiting the provision of wireless service through the WCF at the location? It was conveyed as long as the standards are published ahead of time they are legal. What standards will you apply to a claim that the design standards prohibit the provision of wireless service through a WCF? Who at the county is trained to know if the claim by an applicant is true? What will the County do to staff this with the technical expertise required?	8/28/2019 5:47 AM
4	What is the proof required by the applicant that the design standard prohibits or has the effect of prohibiting the provision of wireless service through the WCF at the location? It was conveyed as long as the standards are published ahead of time they are legal. What standards will you apply to a claim that the design standards prohibit the provision of wireless service through a WCF? Who at the county is trained to know if the claim by an applicant is true? What will the County do to staff this with the technical expertise required?	8/27/2019 3:55 PM
5	This is assault and trespassing by definition. Please do not permanently destroy the future of humanity	8/27/2019 12:40 PM
6	What is the proof required by the applicant that the design standard prohibits or has the effect of prohibiting the provision of wireless service through the WCF at the location? It was conveyed as long as the standards are published ahead of time they are legal. What standards will you apply to a claim that the design standards prohibit the provision of wireless service through a WCF? Who at the county is trained to know if the claim by an applicant is true? What will the County do to staff this with the technical expertise required?	8/25/2019 7:24 AM

## Q8 Do you have detailed suggestions to add, remove or modify anything in Sections 16.1.6 – Review Procedures and 16.1.7 – Application Requirements?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
---	-----------	------



## Wireless Communication Facilities regulations

1	<p>This comment is absolutely critical and imperative to our local control in the future as the changing legal regime of FCC and state laws are in flux. REMOVE 16.1.6 (B). 2. (a.) Small cell facilities shall be a permitted use by right in county rights-of-way subject to review and approval from the county. We do not need to codify with amended language what HB 17-1193 does not exactly say, but is an interpretation. This permit is subject to police powers of the County. The language is not required in the regulations, remove it. HB 17-1193 states "A political subdivision shall NOT regulate A telecommunications PROVIDER OR A BROADBAND PROVIDER based upon the content or type of signals that are carried or capable of being carried over the provider's facilities; except that nothing in this subsection (3) PREVENTS regulation by a political subdivision when the authority to so regulate has been granted to the political subdivision under federal law. So given FCC changing rules and challenges in the legal regime, don't create a back up to HB 17-1193 taking of public control. Combine Table 16.A and 16.B for a thorough view of type of facility, zoning district, type of decision (which to be consistent should say review). Shorten public notice for all types, by using the map proposed in staff memo pg 6, public ability to sign up for email notification of any changes to map. And do not wait until the applicant is approved. Item 16.1.6 (6). Compliance Report. require the compliance report include requirements in the proposed RF measurement and monitoring section. Publish in writing what is a complete application and not just the director's discretion. Thus all requirements published in advance for a complete application are not as easily challenged when the stop clock is stopped and started over.</p>	8/28/2019 11:35 AM
2	<p>All towers and antennas must be tested for safety. Anything that may cause health problems to humans should not be allowed. All must have approval and testing before approved.</p>	8/28/2019 9:29 AM
3	<p>This comment is absolutely critical and imperative to our local control in the future as the changing legal regime of FCC and state laws are in flux. REMOVE 16.1.6 (B). 2. (a.) Small cell facilities shall be a permitted use by right in county rights-of-way subject to review and approval from the county. We do not need to codify with amended language what HB 17-1193 does not exactly say, but is an interpretation. This permit is subject to police powers of the County. The language is not required in the regulations, remove it. HB 17-1193 states "A political subdivision shall NOT regulate A telecommunications PROVIDER OR A BROADBAND PROVIDER based upon the content or type of signals that are carried or capable of being carried over the provider's facilities; except that nothing in this subsection (3) PREVENTS regulation by a political subdivision when the authority to so regulate has been granted to the political subdivision under federal law. So given FCC changing rules and challenges in the legal regime, don't create a back up to HB 17-1193 taking of public control. Combine Table 16.A and 16.B for a thorough view of type of facility, zoning district, type of decision (which to be consistent should say review). Shorten public notice for all types, by using the map proposed in staff memo pg 6, public ability to sign up for email notification of any changes to map. And do not wait until the applicant is approved. Item 16.1.6 (6). Compliance Report. require the compliance report include requirements in the proposed RF measurement and monitoring section. Publish in writing what is a complete application and not just the director's discretion. Thus all requirements published in advance for a complete application are not as easily challenged when the stop clock is stopped and started over.</p>	8/28/2019 5:47 AM
4	<p>This comment is absolutely critical and imperative to our local control in the future as the changing legal regime of FCC and state laws are in flux. REMOVE 16.1.6 (B). 2. (a.) Small cell facilities shall be a permitted use by right in county rights-of-way subject to review and approval from the county. We do not need to codify with amended language what HB 17-1193 does not exactly say, but is an interpretation. This permit is subject to police powers of the County. The language is not required in the regulations, remove it. HB 17-1193 states "A political subdivision shall NOT regulate A telecommunications PROVIDER OR A BROADBAND PROVIDER based upon the content or type of signals that are carried or capable of being carried over the provider's facilities; except that nothing in this subsection (3) PREVENTS regulation by a political subdivision when the authority to so regulate has been granted to the political subdivision under federal law. So given FCC changing rules and challenges in the legal regime, don't create a back up to HB 17-1193 taking of public control. Combine Table 16.A and 16.B for a thorough view of type of facility, zoning district, type of decision (which to be consistent should say review). Shorten public notice for all types, by using the map proposed in staff memo pg 6, public ability to sign up for email notification of any changes to map. And do not wait until the applicant is approved. Item 16.1.6 (6). Compliance Report. require the compliance report include requirements in the proposed RF measurement and monitoring section. Publish in writing what is a complete application and not just the director's discretion. Thus all requirements published in advance for a complete application are not as easily challenged when the stop clock is stopped and started over.</p>	8/27/2019 3:55 PM

## Wireless Communication Facilities regulations

5	Please do not allow millimeter wave technology. Current 4G antennas are on waves with large crests and troughs. Millimeter waves have millimeter-sized crests and troughs which would be incredibly intense for any living organism. 5G antennas are nothing like 4G antennas. Please do not allow 5G antennas anywhere around living organisms.	8/27/2019 12:40 PM
6	This comment is absolutely critical and imperative to our local control in the future as the changing legal regime of FCC and state laws are in flux. REMOVE 16.1.6 (B). 2. (a.) Small cell facilities shall be a permitted use by right in county rights-of-way subject to review and approval from the county. We do not need to codify with amended language what HB 17-1193 does not exactly say, but is an interpretation. This permit is subject to police powers of the County. The language is not required in the regulations, remove it. HB 17-1193 states "A political subdivision shall NOT regulate A telecommunications PROVIDER OR A BROADBAND PROVIDER based upon the content or type of signals that are carried or capable of being carried over the provider's facilities; except that nothing in this subsection (3) PREVENTS regulation by a political subdivision when the authority to so regulate has been granted to the political subdivision under federal law. So given FCC changing rules and challenges in the legal regime, don't create a back up to HB 17-1193 taking of public control. Combine Table 16.A and 16.B for a thorough view of type of facility, zoning district, type of decision (which to be consistent should say review). Shorten public notice for all types, by using the map proposed in staff memo pg 6, public ability to sign up for email notification of any changes to map. And do not wait until the applicant is approved. Item 16.1.6 (6). Compliance Report. require the compliance report include requirements in the proposed RF measurement and monitoring section. Publish in writing what is a complete application and not just the director's discretion. Thus all requirements published in advance for a complete application are not as easily challenged when the stop clock is stopped and started over.	8/25/2019 7:24 AM

## Q9 Do you have detailed suggestions to add, remove or modify anything in Section 16.1.8 – Definitions?

Answered: 6   Skipped: 0

#	RESPONSES	DATE
1	Add definitions Macro and Micro wireless facility, attached facility on existing structure including eligible facilities. All definitions used in the MLA should be the same definitions used in the Land Use Code and not introduce definitions in the MLA not used in the code. See comments submitted in Citizen Comment for Joint Study Session, submitted August 19, for the August 21, 2	8/28/2019 11:35 AM
2	don't give these telecom companies power over our communities. some of these definitions shouldn't even exist. these put our safety in the hands of telecom companies.	8/28/2019 9:29 AM
3	Add definitions Macro and Micro wireless facility, attached facility on existing structure including eligible facilities. All definitions used in the MLA should be the same definitions used in the Land Use Code and not introduce definitions in the MLA not used in the code. See comments submitted in Citizen Comment for Joint Study Session, submitted August 19, for the August 21, 2 August 21, 2019 Citizen Comment for Joint Study Session of Larimer County Commissioners Comments on Attachment A – Land Use Code DRAFT Regulations 16.0 Wireless Communications Facilities Page A-1 A. Purpose 2. Promote and protect the public health,..... The regulations proposed address only visibility and structural integrity of WCFs in the public ROW. We ask if a policy statement can be issued by the County to address the County's desire to meet all legal requirements of federal and state law, and to acknowledge that citizens have deep concerns on the health and environmental effects of 24/7 RF exposures, particularly near their homes. The County has been prohibited by federal law to address the health effects of RF at this time. But recent court ruling in the case of the NRDC vs. FCC has restored environmental and historical reviews. It is a tumultuous legal regime on this subject nationwide creating challenges for local governments. Should future federal and state laws or court ruling open up the opportunity the County will address the concerns of citizens therein to RF exposures and update the Land Use Code. Furthermore, the ruling by the D.C. Court of Appeals in favor of the NRDC vs. FCC case will allow the County to include environmental and historical reviews. Too new a ruling at this time, the regulation draft does not now include these options. A policy statement issued in conjunction with the Land Use Code would guide County staff and the maintenance of the Master License Agreements (MLA) in consistent policy fashion. It would inform the public that their concerns have been heard and acted upon to the best of the ability of the County to do so. Purpose (Cont.) 6. Encourage the location of towers in non-residential areas in a manner that minimizes the total	8/28/2019 5:47 AM

## Wireless Communication Facilities regulations

number of towers needed throughout the community. 8. Encourage owners and users of antennas and towers to locate them, to the extent possible in areas where the adverse impact to the community is minimized. The important distinction here is the word "towers" and therefore Item 6 of purpose above omits all poles and structures under 40' in height and the wide range of antenna installations that can be located on existing infrastructure like street lights, telephone poles, sides of buildings. While Item 8 calls for antennas to be located where the adverse impact to the community is minimized, there is no item found in the regulations that appears to result in such actions. The use of preferred locations in the regulations rather than mention in the MLA would be regulatory not contract. Questions and Comments on Definitions pg. A-16 – A.19 Definitions in the Land Use Code for the equipment of WCFs is very important to understand and apply so the public and applicants will clearly know what type of WCF is being allowed in each zoning district, the review procedures for each type of equipment and the public notice given for each. The definitions section needs to be expanded to include missing definitions, and each definition used in the MLA in the same manner. We ask our Commissioners to use a clear understanding of each definition in the review of the proposed Land Use Code. All WCF equipment listed in the definitions are combined, configured, mounted and placed throughout the community for a wireless network. They all contain powerful antennas transmitting RF 24/7. In years past, transmitting antennas such as these were located in industrial and commercial areas and kept away from our homes where we rest and restore. Page A-16 defines Antennas Page A-17 defines Monopoles, Pole-Mounted Small Cell Facility, Colocation Page A-18 defines Small Cell Facility Page A-19 defines Wireless Communications Facility (WCF) Page A-19 defines Towers Table 16.A Zoning Districts Where SCFs are Allowed (pg. A-3) and Table 16.B Review Procedures and Requirements for Different Facility Types (pg. A-10) force the reader to flip back and forth between the two and apply definitions of the type of WCF equipment in the header column of Table 16. A (i.e. "attached facility on existing structure", "small cell facility", "alternative tower structured (concealed)" and "Tower non-concealed" to the type of review (SP, PSP, MS, SR etc.) in order to then examine Table 16. B to figure out which "decision" i.e. review type) will occur and the public notice and options for appeal therein. One has to flip back and forth to figure the application, decision (review), public notice and appeal process for each type of WCF equipment. If the tables retain these descriptions as the header on Table 16.A, then two definitions should be added to the definitions beginning on pg. A-16. • Attached Facility on Existing Structure (including eligible facilities) • Alternative Tower Structure (Concealed) Definitions missing but contained in the draft of the Land Use Code and the MLA are: • MLA, pg. 29 (11): • macro base station, • macros wireless tower, • macro wireless communication facility. Definitions in the MLA should be consistent with the regulations. At this time, they are not, perhaps just an edit issue in the final drafts still to come. The public appreciates the disclosure of the MLA by the County.

The Most Salient Concern of Citizens in the Land Use Code as drafted in Attachment A The important concern in definitions and their application to the Land Use Code and each term used in Table 16.A and 16.B and meeting the Purpose of the Land Use Code described in Item 6. and 8 above is to interpret clearly where the wireless network equipment will be deployed and how it impacts the places we sleep and restore. Currently the only equipment encouraged to be located out of residential areas is a tower over 40' high. There is nothing in the regulations to encourage or keep WCFs away from the front of our house and on the stations of our first responders. So, if an antenna is on the light post out in front of a home, it makes since to the wireless provider to have a stronger signal at the level of the second story because it would allow for a stronger RF signal for more people – clearing the roof line[s] most likely. But the big negative for humans in the house 30 ft away is that the power density, would be outrageous because it's just past the antenna's near field and just into the beginning of the far field. In RF terminology – that is when the two parts (the electric part and the magnetic part) of the transmission separate to such a degree that RF wave travels thru the air – hence the electromagnetic radiation term. Field strength is related to the distance (the inverse square) so the farther you are from the signal source (the antenna/transmitter) the lower the power density of the radiated frequency. Setbacks allow the power density to decrease given sufficient distance from the home. There are no setbacks in the ROW. Pg. A-4 A.; Pg. 29, MLA (10). There are no setbacks for anything that is not a tower. The illustration below of this near field exposure on an actual child's bedroom in a CA city where 4G/5G has been deployed in residential areas made this house uninhabitable without vacating the front bedrooms and installing RF shielding paint. The child developed severe microwave illness and the other family members experienced a number of symptoms associated with microwave illness. We are asking to address this scenario in the Land Use Code, to implement significant setbacks regardless if the WCF is in the public right of way (ROW) or not. Larimer County has police powers under HB 17-1193 and we are asking you to explore all options to exercise police powers to protect the homes where we rest and recover in and to protect our first responders fire stations (See Citizen Comment, May 28, 2019, Appendix 10: Firefighters Brain Study on RF Exposure and Job Functioning; Public Comment by Susan Foster FCC Docket 13-84) There are serious consequences when humans are located in



## Wireless Communication Facilities regulations

the near field of RF emissions. Links to only a few effects from the US National Library of Medicine National Institute of Health Pub Med.gov, the access source for the scientific community to peer reviewed scientific papers. • Biological Effects from RF Radiation <https://bioinitiative.org/rf-color-charts/> • The microwave syndrome or electro-hypersensitivity: historical background. <https://www.ncbi.nlm.nih.gov/pubmed/26556835> • Microwave frequency EMFs produce widespread neuropsychiatric effects including depression. <https://www.ncbi.nlm.nih.gov/pubmed/26300312> • Europaem EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses. <https://www.ncbi.nlm.nih.gov/pubmed/27454111> • Role of Mitochondria in the Oxidative Stress Induced by EMFs: Focus on Reproductive Systems. <https://www.ncbi.nlm.nih.gov/pubmed/30533171>

4	Add definitions Macro and Micro wireless facility, attached facility on existing structure including eligible facilities. All definitions used in the MLA should be the same definitions used in the Land Use Code and not introduce definitions in the MLA not used in the code.	8/27/2019 3:55 PM
5	Please do not allow millimeter wave technology. Current 4G antennas are on waves with large crests and troughs. Millimeter waves have millimeter-sized crests and troughs which would be incredibly intense for any living organism. 5G antennas are nothing like 4G antennas. Please do not allow 5G antennas anywhere around living organisms.	8/27/2019 12:40 PM
6	Add definitions Macro and Micro wireless facility, attached facility on existing structure including eligible facilities. All definitions used in the MLA should be the same definitions used in the Land Use Code and not introduce definitions in the MLA not used in the code. See comments submitted in Citizen Comment for Joint Study Session, submitted August 19, for the August 21, 2019 study session.	8/25/2019 7:24 AM

- (4) Hazardous Materials. No hazardous materials shall be permitted in association with SCFs, except those necessary or requested for the operations of the SCFs and only in accordance with all Applicable Laws governing such materials.
- (5) Siting.
  - a. No portion of any SCF may extend beyond the right-of-way without prior approval(s).
  - b. Preferred Locations. This section provides guidance as to best location for SCFs. The county prefers SCFs in the public rights-of-way to be installed in locations ordered from most preferred to least preferred as follows:
    - i. Locations on or along arterials;
    - ii. Locations on or along major collectors;
    - iii. Locations on or along minor collectors; and
    - iv. Locations on or along local streets or neighborhood access streets.
  - c. Preferred Support Structures. The county prefers SCFs to be installed on support structures in the public rights-of-way ordered from most preferred to least preferred as follows:
    - i. New, non-replacement streetlight poles;
    - ii. Existing or replacement streetlight poles, if structurally capable;
    - iii. Existing or replacement traffic signal poles;
    - iv. Existing or replacement wood utility poles;
    - v. New, non-replacement poles for small cell facilities.
  - d. Prohibited Support Structures. The county prohibits SCFs to be installed on the following support structures:
    - i. Decorative poles at county facilities;
    - ii. Any utility pole scheduled for removal or relocation within 12-months from the time the approval authority acts on the SCF;
    - iii. New, non-replacement wood poles;
    - iv. Buildings in residential neighborhoods.
  - e. Additional placement requirements. SCFs and related equipment shall be:
    - i. When possible, be placed at least 400 feet away from any building used principally for residential use;
    - ii. When possible, be placed along rear or secondary front yard property lines that abut the rights-of-way;
    - iii. Be placed as close to the property line between two parcels;
    - iv. Not be placed directly in front of any door or window;
    - v. Not be placed within any sight distance triangles at intersections;
    - vi. No be placed in any location that obstructs view lines for travelling vehicles, bicycles, and pedestrians, including ADA accessibility;
    - vii. Not obstruct views of traffic signs or signals;
    - viii. Not obstruct illumination patterns for streetlights; and
    - ix. When possible be placed in a median within the right-of-way.