

Thurston County Community Planning and Economic Department
Community Planning Division

THURSTON COUNTY

PLANNING COMMISSION DRAFT

Commented [KN1]: Updates to the draft are shown in tracked changes.

WIRELESS UPDATE

Chapters 20.33, 20.03, and 22.54

Chapter: 20.03 (Attachment A)

20.54 (Attachment B)

20.33 (Attachment C) –Replacement

Commented [KN2]: Repealed strikethrough of current Chapter 20.33 no longer included, at PC request.

Deleted Text: ~~Strikethrough~~ Proposed Changes: Underlined
Staff Comments: *Italics* Unaffected Omitted Text ...

These proposed code amendments are associated with the Wireless code update. A repeal and replace to the existing Wireless Communication Facilities and Antenna Support Structures (20.33) will also result in an update to Definitions (TCC 20.03) and to Special Use (TCC 20.54).*

Attachment A – Thurston County Zoning Ordinance (Title 20)

Chapter 20.03 TCC has proposed amendments to include new and updated definitions relevant to the repeal and replace of Chapter 20.33 TCC.

Chapter 20.03 – STRUCTURE, INTERPRETATION AND DEFINITIONS

...

20.03.040 - DEFINITIONS.

The following definitions shall be used in the interpretation and administration of this title. The definition of various terms as presented in this section does not necessarily represent the same definitions as may be found for the same terms in other chapters of the Thurston County Code.

3.7 “Alternative Support Structure” or “Concealed Support Structure” means facilities designed to incorporate the surrounding community’s environs while minimizing aesthetic impacts, and with respect to “concealed” further means that the facility is designed to look like something other than a WCF, consistent with the definition of Concealment herein. Examples include, but are not limited to, steeples, tree designs, windmills, water towers, flagpoles, light poles, or chimneys. A stand-alone pole housing small wireless facilities, that incorporates camouflage or concealed design features to shield small wireless facilities from view, is considered an alternative or concealed support structure for purposes of this Code.

3.7 Antenna, WCF. “WCF antenna” means any exterior apparatus designed for telephonic, radio, data or internet communication through the sending and/or receiving of electromagnetic waves.

3.8 “Antenna support structure” means a tower, monopole, or other structure used to support radio, television, wireless communication (including pagers), or automated meter reading antennas and/or repeaters. It includes new or replacement utility poles that would exceed the height of adjacent poles for the purpose of providing sufficient elevation to accommodate antennas. It does not include existing buildings or other structures not specifically listed above that serve a primary function other than to support antennas (including, but not limited to, water tanks, existing utility poles, and light standards).

3.8 “Antenna” means any exterior transmitting or receiving device mounted on a tower, building or structure and used in communications that radiates or captures electromagnetic waves, digital

Commented [KN3]: Some definitions are as close as possible to that provided by the Federal Communications Commission (FCC), and some discretion was used by the legal team for others to best support the County. New definitions in this draft are included or updated to be consistent with FCC language.

Commented [CM4]: This definition is something we developed after working with multiple communities that did not want to allow Towers in the Right of Way. Unless you call it something else, a pole in the ROW with small cells is technically a tower under federal law. Yet we treat macro towers differently than we treat small cells in the ROW, where we are more limited by FCC regulations. While this is not a term used by the FCC, we have found it beneficial to local governments. The County will have to make a policy decision as to whether it wants to bar Towers from the ROW.

Commented [KN5]: Definitions that are being deleted are done so either because of a change in formatting or it’s covered under a different definition.

signals, analog signals, radio frequencies (excluding radar signals), wireless telecommunications service signals or other communication signals.

3.8.5 "Approval authority" means the director of the Thurston County Resource Stewardship Department, or his/her designee, for administrative permits.

7.6 "Base Station" means a structure or equipment at a fixed location that enables FCC licensed or authorized wireless communications between user equipment and a communications network. The term does not encompass a tower or any equipment associated with a tower.

Commented [ksf6]: This is a definition from the FCC regs.

- a. The term includes, but is not limited to, equipment associated with wireless communications services such as private, broadcast, and public safety services, as well as unlicensed wireless communications and fixed wireless communications such as microwave backhaul.
- b. The term includes, but is not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration (including distributed antenna systems and small-cell networks).
- c. The term includes any structure other than a tower that supports or houses equipment that 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.
- d. The term does not include any structure that does not support or house equipment for wireless telecommunications services.

14.6 "Camouflage" means a palette of techniques used to minimize appearance or visual impact of a wireless communication facility by blending its appearance into elements of the visual

background. The term connotes the use of paint, landscaping, building materials and artificial screens in patterns that merge with the elements in the background environment.

14.7 “Collocation” for the purposes of eligible facilities requests, 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.

14.8 “Collocation” for the purpose of applications to site small wireless facilities and other WCFs, excluding eligible facilities requests, means:

- a. Mounting or installing an antenna facility on a preexisting structure; or
- b. Modifying a structure for the purpose of mounting or installing an antenna facility on that structure.

14.9 Concealed Support Structure. See “Alternative Support Structure”

14.10 “Concealment” means utilization of elements of stealth design in a facility so that the facility looks like something other than a tower or base station. Language such as “stealth” or similar terms in any permit or other document is included in this definition to the extent such permit or other document reflects an intent at the time of approval to condition the site’s approval on a design that looks like something else. Concealment can further include a design which mimics and is consistent with the nearby natural, or architectural features (such as an artificial tree), or is incorporated into (including without limitation, being attached to the exterior of such facility 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 apparent. This definition does not include conditions that merely minimize visual impact but do not incorporate concealment design elements so that the facility looks like something other than a tower or base station.

44.6 “Eligible facilities request” or “EFR” means any request for modification of an existing tower or base station that does not substantially change the physical dimension of such tower or base station, involving:

- a. Collocation of new transmission equipment;
- b. Removal of transmission equipment; or
- c. Replacement of transmission equipment.

44.7 “Eligible support structure” means any tower or base station; provided, that it exists at the time the relevant application for an EFR is filed with the county.

45.3 “Equipment cabinet or Shelter” means an enclosed structure, shed, or box in proximity to a support structure, above or underground, to store improvements, personal property, and facilities to operate its wireless communications, including: radio receivers, transmitters, related facilities,

Commented [CM7]: These terms are all defined by the FCC.

Commented [CM8]: This definition, which comes from a 2020 FCC Rulemaking, allows local governments to retain control over aesthetics to the fullest extent allowed under federal regulations. By requiring facilities to be concealed (as opposed to “camouflaged” or “stealth”), local governments retain more control over the aesthetics and local character of an area. A concealment requirement also gives local governments more power over future applications for Eligible Facilities Requests (EFRs), because requests for modifications that would defeat concealment do not get the benefit of the shortened review procedure or the mandatory approval for EFRs.

Commented [CM9]: These terms are defined by the FCC and discussed further below.

and cabinets, related cables and utility lines, location-based power sources, the electrical meter and any other necessary equipment.

45.5 “Essential public facilities” means public facilities and privately-owned or operated facilities serving a public purpose that are typically difficult to site. They include but are not limited to:

- a. State education facilities; state or regional transportation facilities; prisons, jails and other correctional facilities; solid waste handling facilities; airports; and inpatient facilities such as group homes, mental health facilities and substance abuse facilities; sewage treatment facilities; and communication towers and antennas.
- b. Facilities identified by the State Office of Financial Management as essential public facilities, consistent with RCW 36.70A.200; and
- c. Facilities identified as essential public facilities in [Chapter 20.54](#) TCC.

45.6 “Existing” Any tower or base station is existing for purposes of TCC 20.33 if it has been reviewed and approved under the applicable zoning or siting process, or under another state or local regulatory review process; provided, that a tower that has not been reviewed and approved but continues as a legal nonconforming structure as authorized and defined under Chapter 20.56 TCC, is “existing” for purposes of this chapter.

46.8 “FCC” or “Federal Communications Commission” means the federal agency, or its lawful successor, authorized to regulate and oversee wireless services and providers.

61.5 “Guy Tower” means towers supported by guy wires and are designed with the ability to carry light to heavy antenna loads. A guy tower with antenna attachments generally does not have the structural capacity to stand unsupported and requires guy lines to resist lateral forces such as wind loads and keep it upright.

72.2 “Lattice tower” means a type of support structure that is self-supporting with multiple legs and cross bracing of structural steel.

86.3 “Monopole” means a support structure that is self-supporting with a single shaft of wood, steel or concrete.

116.3 “Rights-of-way” means each of the following which have been dedicated to the public or are hereafter dedicated to the public and maintained under public authority or by others and located within the County: streets, roadways, highways, avenues, lanes, alleys, bridges, sidewalks, easements. Right-of-Way does not include any private property, or any other public property owned, in whole or in part, leased, or otherwise occupied by the County, including but not limited to parks, trails, and open space.

122.7 “Service provider” means every corporation, company, association, joint stock association, firm, partnership, person, County, town, or other legal entity building, owning, operating, or managing any facilities used to provide wireless telecommunication services for hire, sale, or

Commented [KN10]: Definitions were also developed with input from the County’s Public Works Department.

resale to the general public. Service provider includes the legal successor to any such corporation, company, association, joint stock association, firm, partnership, person, County, town, or other legal entity.

127.5 Site, WCF. “WCF Site” means the current boundaries of the leased or owned property surrounding the facility and any access or utility easements currently related to the site, and for other eligible support structures, further restricted to that area in proximity to the structure and to other transmission equipment already deployed on the ground.

127.7 “Small wireless facility” means a personal wireless services facility that meets both of the following qualifications:

a. Each antenna is located inside an antenna enclosure of no more than three 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 cubic feet; and

b. Primary equipment enclosures are no larger than seventeen cubic feet in volume. The following associated equipment may be located outside the primary equipment enclosure and if so located, are not included in the calculation of equipment volume: Electric meter, concealment, telecomm demarcation box, ground-based enclosures, battery back-up power systems, grounding equipment, power transfer switch, and cut-off switch.

138.3 “Substantial Change” means a change to the physical dimensions of an eligible support structure if after the modification, the structure meets any of the following criteria:

a. For towers other than towers in the rights-of-way, it increases the height of the tower by more than ten 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, as measured from the top of an existing antenna to the bottom of a proposed new antenna; 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, as measured from the top of an existing antenna to the bottom of a proposed new antenna;

b. For towers, it involves adding an appurtenance to the body of the tower that would protrude from the edge of 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 edge of the structure by more than six (6) feet;

c. For any eligible support structure, it involves installation of more than the standard number of new equipment cabinets for the technology involved, as determined on a case-by-case basis based on the location of the eligible support structure but not to exceed four cabinets per application; or for 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

Commented [CM11]: This definition was originally adopted by FCC regulations a number of years ago and changed by the FCC in 2020 with the intent to facilitate faster deployment of 5G infrastructure. The definition is important because a modification to an existing wireless facility that results in a substantial change does not qualify as an Eligible Facilities Request, and does not receive the benefit of the shortened review procedures for EFRs. Under this new definition, more modifications will qualify as EFRs and the County will be required to review them within the EFR shot clock of 60 days, and will have no authority to deny them.

percent larger in height or overall volume than any other ground cabinets associated with the structure;

d. For any eligible support structure, it entails any excavation or deployment outside the current site, except that, for towers other than towers in the public rights-of-way, it entails any excavation or deployment of transmission equipment outside of the current site by more than 30 feet in any direction. The site boundary from which the 30 feet is measured excludes any access or utility easements currently related to the site.;

e. For any eligible support structure, it would defeat the concealment elements of the eligible support structure by causing a reasonable person to view the structure's intended stealth design as no longer effective;

f. For any eligible support structure, it does not comply with record evidence of conditions associated with the siting approval of the construction or modification of the eligible support structure or base station 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 a, b, and c 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 building rooftops; in other circumstances, changes in height are measured from the dimensions of the tower or base station, inclusive of approved appurtenances and any modifications that were approved prior to February 22, 2012.

138.5 "Tower" means any structure that is designed and constructed primarily for the purpose of supporting one or more antennas for telephone, radio, wireless service, and similar communication purposes, including self-supporting lattice towers, guyed towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers, alternative support structures, and the like. The term includes the structure and any support thereto.

138.12 "Transmission equipment" means equipment that disseminates information by wire, radio, optic cable, electromagnetic, or similar means for any FCC licensed or authorized wireless telecommunication 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 telecommunications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless communications and fixed wireless communications such as microwave backhaul.

141.7 "Utility pole" means a pole owned or installed by a utility, fiber, or cable company for the purpose of supporting above ground wireline and wireless facilities.

146.1 "Wireless communication facility (WCF)" shall be defined in the same manner as in Title 47, United States Code, Section 332(e)(7)(C), as amended now or in the future, and includes facilities for the transmission and reception of radio wave or microwave signals used for

Commented [KN12]: This addition is from an update to the FCC definitions.

Commented [ksf13]: This definition is from the FCC regulations.

Commented [ksf14]: This definition is from the FCC regulations.

~~communication, cellular phone, personal communications services, enhanced specialized mobile radio, and any other wireless services licensed by the Federal Communications Commission (FCC) and unlicensed wireless services. This does not include AM/FM radio and television broadcast facilities or towers, or automated meter reading facilities. "Wireless" means communications using radio frequency to complete one or more communications paths in whole or in part among originating and receiving points without other tangible physical connection, including, without limitation, radio waves, and the apparatus used for such transmission.~~

146.2 ~~Wireless Communication Facility (WCF), Attached. "Attached wireless communication facility (WCF)" means WCF equipment affixed to or erected upon existing buildings, water tanks, utility poles or other existing structures, excluding co location. "Wireless communication facility" or "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; or wireless utility monitoring and control services. 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 an antennas used for serving that building only and that are otherwise permitted under other provisions of the TCC. A WCF includes an antenna or antennas, including without limitation, direction, 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 communication subscribers, such as vehicle or hand-held radios or telephones and their associated transmitting antennas, nor does it include other facilities specifically excluded from the coverage of this title.~~

Commented [ksf15]: This is not a definition adopted in an FCC regulation, but is based upon and consistent with how the FCC describes WCFs in multiple regulatory rulings.

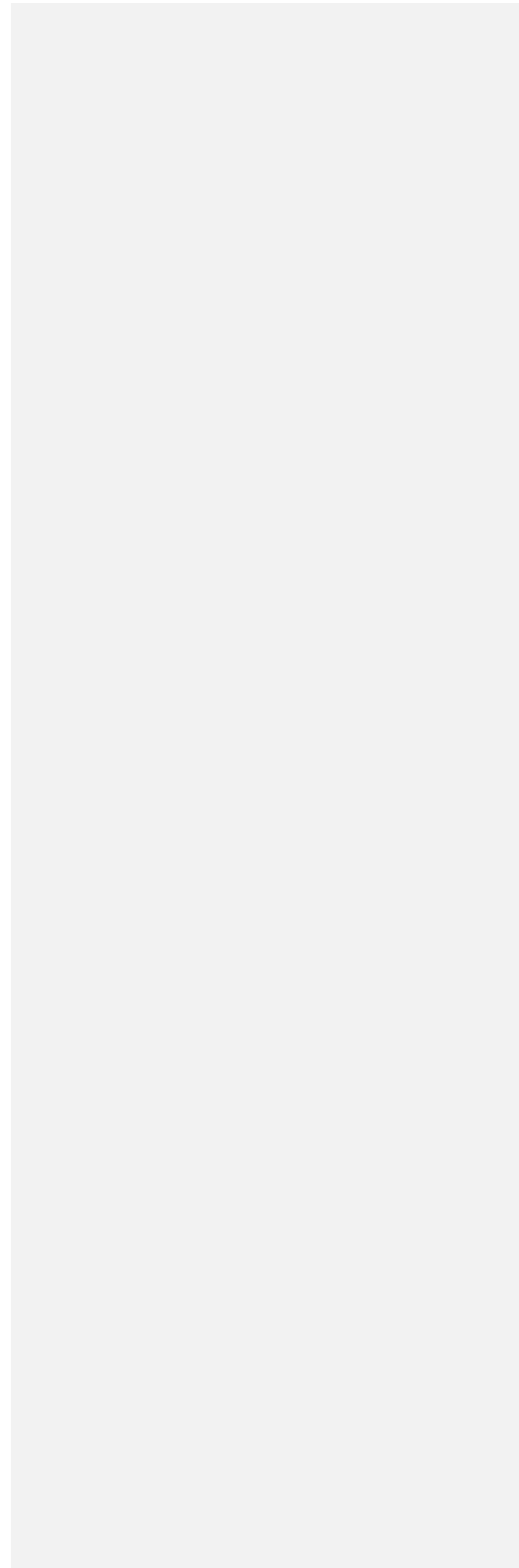
146.3 ~~Wireless Communication Facility (WCF), Freestanding. "Freestanding wireless communication facility (WCF)" means a freestanding antenna support structure erected to support wireless communication facilities, associated equipment cabinets, and connecting appurtenances. This includes guyed towers, self-supporting lattice towers, monopoles, camouflage structures, replacement utility poles, and other self-supporting poles and towers accommodating wireless communication antennas. "Wireless service" means the transmission of information by wire, radio, optic cable, electromagnetic, or similar means for hire, sale or resale to the general public. For the purpose of this subsection, "information" means knowledge or intelligence represented by any form of writing, signs, signals, pictures, sounds, or any other symbols. For the purpose of this chapter, "wireless service" excludes the over-the-air transmission of broadcast television or broadcast radio signals.~~

Commented [ksf16]: This too is consistent with how the FCC describes wireless service in multiple regulatory rulings.

146.4 ~~Wireless Communication Facility (WCF)/Antenna Support Structure, Remote-Freestanding. "Remote freestanding wireless communication facility (WCF)" means a freestanding antenna support structure erected to support wireless or other communication facilities within the long-term forestry district or military reservation which are located over one~~

Wireless Code Update A-19
Chapter 20.33, 20.03, 20.54
Planning Commission

~~thousand four hundred feet from the district boundary or from a property with an existing residence.~~



Attachment B – Thurston County Zoning Ordinance (Title 20)

Chapter 20.54 TCC has proposed amendments to update language based on new definitions relevant to the repeal and replace of Chapter 20.33 TCC.

Chapter 20.54 – SPECIAL USE*

Sections:

20.54.015 Approval authority

Table 1 Special Uses – Distribution in County Zoning Districts

20.54.070 Use – Specific Standards

20.54.015 – Approval authority

1. Administrative Approval. Applications for the following types of special uses shall be reviewed and approved, modified or denied by the department:
 - a. Home occupations;
 - b. Expansions of nonconforming, nonresidential uses by no more than five percent;
 - c. Mobile or manufactured home parks (two to four mobile/manufactured homes per lot);
 - d. Temporary uses listed in Section 20.54.070(41.5)(b) in zoning districts shown on Table 1;
 - e. Attached or collocated WCFs;
 - f. ~~Remote freestanding WCF/antenna support structures that would not extend more than thirty feet above all adjacent trees within one hundred feet of the proposed WCF tower/antenna support structure location and would be located more than one mile from a residential district and co-located WCFs that do not require an increase in the height of the antenna support structure~~
 - g. Family day care provider; and
 - h. Community club.

Commented [KN17]: Mistakenly left out of the last draft. (f) is being deleted because "Remote freestanding WCF" is a term that is proposed to be removed.

Table 1 – Distribution in County Zoning Districts

USE	R 1/20	R 1/10	RRR 1/5	RR 1/5	UR 1/5	RL 1/2	RL 1/1	RL 2/1	R3 - 6/1	R4 - 16/1	LI	RRI
...
44.3 Wireless communication facilities (WCFs) – attached or co-located <u>attached or collocations</u>	A/X	A/X	A/X	A/X	A/X	A/X	A/X	A/X	A/X		A/X	A/X
44.4 WCFs/antenna support structures – remote freestanding												
44.6 (WCFs)/antenna support structures – freestanding* towers*	X	X	X	X	X	X	X		X		X	X

Commented [KN18]: The previous copy of this draft did not include all zones. For ease of viewing purposes, it has been split up here into two tables, with the same “Use” category in each. To view the entire table, please see TCC 20.54 Special Use*.

Commented [KN19]: Collocations have been changed in this draft to be a Type 1 Administrative Special use permit because of the FCC shot clocks. The County cannot change the permit process for special use permits, as had been previously suggested. This is also consistent with permit types provided under 20.33.050, Permit Approval.

USE	NC	RCC	AC	HC	SL1	MGSA2	LTA	NA	LTF	PP	MR	AOD	MEI
...
44.3 Wireless communication facilities (WCFs) – attached or co-located <u>attached or collocations</u>	A/X	A/X	A/X	<u>A</u>	A/X	A/X	A/X	A/X	<u>A</u>	<u>A</u>	A/X		A/X
44.4 WCFs/antenna support structures – remote freestanding									A/X		A/X		
44.6 (WCFs)/antenna support structures – freestanding* towers*	X	X	X	<u>X</u>	X	X	X	X	<u>X</u>	<u>X</u>	X		

Commented [KN20]: The original intention was that this also included attached facilities, but there had been some back and forth on language. Including “attached” now.

Commented [KN21]: Remote freestanding WCFs are those located within LTF, NA, and MR and are located over one thousand four hundred (1,400 ft) from the district boundary or from a property with an existing residence. These were allowed under an administrative permit if the WCF did not extend more than thirty feet above all adjacent trees within one hundred feet of the proposed WCF and were located more than one mile from a residential district. (Note that the definition of Remote freestanding WCFs states LTF and MR, but the table shows NA and MR).

It was originally deleted at the suggestion of County staff, only because it wasn’t being applied for.

X = Special use permit (approval authority is hearing examiner)

A = Administrative special use permit (approval authority is staff)

1 = Summit Lake overlay zone, Chapter 20.30

2 = Except as prohibited or limited in Chapter 20.23

3 = Applies to uses related to public parks, trails and preserves and not otherwise permitted in Chapter 20.08E

*May qualify as an essential public facility; refer to TCC 20.54.065

...

20.54.070 Use – Specific Standards

~~44.3 Wireless Communication Facilities (WCFs)/Antenna Support Structures (Including Radio and Television Towers) – Attached and Collocations.~~ See Chapter 20.33.

~~44.6 Wireless Communication Facilities (WCFs)/Antenna Support Structures – Freestanding (Including Radio and Television Towers) - Towers.~~ See Chapter 20.33.

~~44.8 WCF/Antenna Support Structures – Remote Freestanding (Including Radio and Television Towers).~~ See Chapter 20.33.

Commented [KN22]: This is in the existing Special Use chapter associated with viewing Table 1 and was not left out of this draft intentionally.

Commented [KN23]: These terms have been updated.

Attachment C – Thurston County Zoning Ordinance (Title 20)

The proposed amendments to Chapter 20.33 TCC will result in a full repeal of the existing Chapter that was adopted under Ordinance 13058 in 2003 and replace with the language below.

Chapter 20.33 – WIRELESS COMMUNICATION FACILITIES

Sections:

- 20.33.010 Applicability.
- 20.33.020 Purpose.
- 20.33.030 Exemptions.
- 20.33.040 Prohibited locations.
- 20.33.050 Permit approval.
- 20.33.060 Application requirements.
- 20.33.070 Permit approval process.
- 20.33.080 Permit review criteria.
- 20.33.090 Permit review criteria for special uses subject to type III review.
- 20.33.100 Completeness review.
- 20.33.110 Time frame for review.
- 20.33.120 Appeals.
- 20.33.130 Design and performance standards.
- 20.33.140 Maintenance of facilities.
- 20.33.150 Radio-frequency (RF) emissions.
- 20.33.160 Testing of facilities required—Noise emissions.
- 20.33.170 Public safety.
- 20.33.180 Abandonment of facilities.
- 20.33.190 Signs.
- 20.33.200 Lighting standards.
- 20.33.210 SEPA.
- 20.33.220 Adjustments to standards.

20.33.010 Applicability

A. Except as otherwise provided herein, the placement of any Wireless Communication Facility (WCF) at any location within the County is subject to the provisions of this chapter.

B. The standards and process requirements of this chapter supersede all other review process and approval criteria, setback, height, or landscaping requirements of this title.

20.33.020 Purpose

The purposes of this chapter are as follows:

A. Establish development regulations consistent with the County’s Comprehensive Plan;

B. Manage the location of WCFs and associated equipment by providing standards for their placement, design, construction, maintenance, modification, and removal;

C. Provide a non-discriminatory and competitively neutral regulatory environment, consistent with applicable law;

D. Protect property values and promote tourism through protection of scenic vistas of the mountains, tree-covered hillsides, the waterfront, and tourist-related zones and areas;

E. Facilitate the appropriate use of public property and structures for wireless communication facilities (WCFs) to reduce the impact of such facilities upon residential and other property;

F. Maintain the quality of life associated with the aesthetic character of the County's surroundings;

G. Provide adequate sites for locating WCFs in areas where the adverse impact on the community is minimized;

H. Provide facilities and infrastructure to provide wireless service to County residents, businesses, and others when in Thurston County;

I. Encourage optimal collocation and sharing of new and existing WCFs when feasible, and minimize the total number of towers throughout the community;

J. Encourage the prompt removal of outdated or abandoned wireless communication facilities;

K. Encourage the location of WCFs upon alternative support structures; where feasible;

L. Require that the design of WCFs incorporate camouflage, screening, and concealment technology so that such facilities blend into their surroundings, where appropriate to the surroundings; and where appropriate, make the WCF appear to be something other than a WCF;

M. Avoid potential risk to adjacent properties from tower failure by engineering and careful siting of tower structure;

N. Enhance the ability of the wireless service providers to provide such services to the community quickly, effectively, and efficiently; and

O. Effectively manage WCFs in the rights-of-way.

20.33.030 Exemptions

The following are exempt from a special use permit but are subject to other permit requirements of the TCC, as applicable, such as building permits or rights-of-way permits.

A. Uses that do not qualify as a substantial change, as defined in TCC 20.03.040.

B. Temporary WCFs necessary for emergency communications during an emergency declared by a public entity.

Commented [CM24]: This is an area where the County will have to make a policy decision as to whether it wants to encourage and incentivize use of these types of structures for location of WCFs.

Commented [CM25]: The initial siting of WCFs is an area where local governments retain significant authority under FCC rules. We generally advise, and we know the County is interested in, creating stringent design standards in order to maintain local control over the design and aesthetics of wireless facilities and to preserve community character as much as possible.

C. Temporary WCFs installed for providing coverage of a special event; however, such WCFs are still subject to prior written approval of the County. For purposes of this exemption, the facility is deemed to be temporary if it is in place for up to two weeks prior to and after the event.

D. Temporary WCFs installed for not more than one hundred eighty days, subject to extensions, during repair, replacement, or relocation of an existing WCF or construction of a new WCF.

E. Pre-existing WCFs for which a permit has been properly issued prior to July 1, 2017;

F. Industrial processing equipment and scientific or medical equipment using frequencies regulated by the FCC.

G. Antennas and related equipment that are being stored, shipped or displayed for sale.

H. Radar systems for military and civilian communication and navigation.

I. Amateur (ham) radio stations.

20.33.040 Prohibited and Preferred locations

A. Prohibited.

1. WCFs and other antenna support structures are prohibited on sites or structures, which are on federal, state, or county recognized historic registers, state and local wildlife refuges, and permanently protected archaeological sites. WCFs and associated structures shall not be located within 100 feet of wetlands, staging areas, or rookeries supporting birds listed as priority species by the Washington Department of Fish and Wildlife, listed as endangered or threatened species under the federal Endangered Species Act.

2. Notwithstanding the foregoing, small wireless facilities may be permitted on such sites, when exceptions are authorized under applicable state, federal, and local law governing the same. WCFs, except for small wireless facilities, are prohibited in the rights-of-way.

B. Preferred. For all WCFs, it is the County's preference that WCFs shall be located in one of the following zones:

Light Industrial (LI), Rural Resource Industrial (RRI), Planned Industrial Park (PI), Neighborhood Convenient (NC), Rural Commercial Center (RCC), Arterial Commercial (AC), Highway Commercial (HC), or Long-Term Forestry (LTF).

An applicant not able to meet the County's preference of zone shall provide as much detail as reasonably possible for evaluation by County staff, demonstrating the reasons the applicant must locate a WCF in a non-priority zone.

20.33.050 Permit approval

Commented [KN26]: This language is similar to what is in the current County code and was requested by staff in the draft.

Commented [KN27]: This is being removed as proposed draft language after discussing regulations for facilities in the rights-of-way. This is better addressed by street standards.

Commented [KN28]: This language is included after discussion with Planning Commission at a work session.

Allowed zoning districts are specified in Table 1, Special Uses – Distribution in County Zoning Districts, within TCC Chapter 20.54. Allowed uses for the Urban Growth Areas (UGAs) can be found in TCC Titles 21, 22, and 23.

Table 1 – Permit Approval

<u>Permitted</u>	<u>WCFs that do not qualify as a substantial change, as defined in TCC 20.03.040.</u>
<u>Administrative Special Use Permit (A)</u>	<u>New or modified WCFs collocating or attaching to an existing structure.</u> <u>Towers located in Light Industrial (LI), Rural Resource Industrial (RRI), Planned Industrial Park (PI), Neighborhood Convenience (NC), Rural Commercial Center (RCC), Arterial Commercial (AC), Highway Commercial (HC), or Long-Term Forestry (LTF).</u>
<u>Hearing Examiner Special Use Permit (X)</u>	<u>WCFs on a new structure.</u> <u>Towers not located in a preferred zone.</u>

A. ~~WCF on a New Structure. A special use permit for WCFs on a new structure shall require a Type III Procedure (Quasi-Judicial Decision), with review by a hearing examiner, in accordance with the procedures in Chapters 20.54 and 20.60. Where there is a discrepancy in special use permit requirements between this chapter and chapters 20.54 and 20.60, this chapter shall supersede.~~

B. ~~Collocating Facilities on Existing Structures. A type I Procedure (Administrative Decision) special use permit (SUP) is required for the collocation of new or modified WCFs, including Eligible Facilities Requests that are collocating on an existing structure.~~

BC. No special use permit may be issued under this chapter unless the applicant demonstrates compliance with the terms, conditions, and performance standards set forth in this chapter. Any SUP subject to a Type III review must also meet the criteria for said use permits set forth in TCC 20.33.090+00.

CD. Facilities in the Rights-of-Way. Construction of new small wireless facilities in the rights-of-way and collocation or modification to any small wireless facilities in the rights-of-way may only occur after the following:

1. A type I Procedure (Administrative Decision) special use permit (SUP) is issued by the County to the applicant for the proposed small wireless facility. For purposes of this

Commented [KN29]: It was determined that an EFR would be permitted instead of being an administrative special use permit.

title, a stand-alone pole in the rights-of-way, the sole or primary purpose of which is to house Small Wireless Facilities, shall not be treated as a Tower but are still required to obtain the appropriate special use permit.

2. The applicant shows that they have an affidavit documenting the right to collocate or modify the structure;

3. Small wireless facilities in the rights-of-way must comply with TCC 13.56, [Thurston County Rights-of-way](#);

4. New poles in the rights-of-way must comply with Washington State Department of Transportation (WSDOT) clear zone standards;

5. Small wireless facilities in the rights-of-way must comply with the Thurston County Road Standards, as adopted in Section 15.04.081 of the TCC, or as subsequently amended; and

6. When applying for an EFR application, all work must be completed in accordance with all applicable requirements as set forth in this Code and any other applicable regulations.

For purposes of this title, a stand-alone pole in the rights-of-way, the sole or primary purpose of which is to house Small Wireless Facilities, shall not be treated as a Tower but are still required to obtain the appropriate special use permit.

E. Franchise Agreement Required. No person or entity who desires to locate facilities ~~on~~ in County ~~property rights-of-way~~ shall locate such facilities or equipment on County property unless granted a franchise agreement from the County pursuant to TCC 13.72 Franchises.

20.33.060 Application requirements

A. Requirements for all applications. A lease agreement with accurate and up to date information for the property owner may be submitted in place of the property owner information required as a part of TCC 20.60.030. In addition to TCC 20.60.030 , the following information shall be submitted as part of the application for all WCFs subject to this chapter:

1. Identification of all service providers using the facility;

2. If the applicant is not the owner or person in control of the structure or site, an attestation that the owner or person in control of the eligible support structure or site has consented to the proposed WCF or modification. If the WCF or eligible support structure is to be located within a public rights-of-way, the applicant must also attest that the applicant has authorization to install, maintain, and operate transmission equipment in, under, and above the public rights-of-way;

3. An attestation that the permittee will comply with existing structural, electrical, and safety codes, and a description of the general structural capacity of the new WCF and

Commented [KN30]: This was moved to 20.33.050 Permit Approval (D)(1) for readability.

Commented [KN31]: There is some flexibility on what the County requires for applications, but it is on a case by case basis. Some language has been removed from the proposed language compared to the existing code because the FCC has put limits on certain terms and tests.

associated structure upon which the WCF is to be attached or the general structural capacity of the proposed modification, if applicable;

4. If the applicant proposes a modification requiring alteration to an eligible support structure, excavation, installation of new equipment cabinets, or other activities impacting or altering the land, existing structures, fencing, or landscaping, the applicant must submit a detailed site plan and drawings, showing the point of true north, and an appropriate scale depicting:

a. The location, elevation, and dimensions of the existing, proposed for collocation, modification, or replacement structures, transmission equipment, and equipment cabinets, as applicable;

b. The location of existing structures on the site, including fencing, screening, trees, and other significant site features; and

c. The location of any areas where excavation is proposed showing the elevations, depths, and width of the proposed excavation and materials and dimensions of the equipment to be placed in the area excavated.

5. If the applicant proposes a modification that will protrude from the edge of a non-tower -structure, record drawings, as-built plans, or the equivalent, showing at a minimum the edge of the -structure at the location of the proposed modification;

6. Copies of the land use or building permit approval that authorized the original installation of any existing tower or structure, or any subsequent approval(s) granting modifications, if applicable;

7. If new generators, or any other noise producing equipment components are being proposed, an assessment of noise that shows compliance with County and state noise standards; and

8. A stamped report by a state of Washington registered professional engineer, or a verified statement from a qualified radio frequency engineer, demonstrating or assuring that the site will be in full compliance with federal radio-frequency emissions standards for wireless facilities.

B. Eligible Facilities Request. The application for an EFR shall not require the applicant to demonstrate a need or business case for the proposed modification or collocation. In addition to A, a complete application for an administrative SUP for an eligible facilities request includes:

1. A detailed explanation of how the proposed facilities modification is subject to review under Section 6409 of the Spectrum Act, 47 U.S.C § 1455(a), and 47 C.F.R. § 1.6100.

~~2. If the proposed modification will alter the exterior dimensions or appearance of the eligible support structure, the applicant shall include a~~ detailed visual simulation

Commented [CM32]: Deleted to require visual simulations for EFRs in all circumstances

depicting how the eligible support structure will appear after the proposed modification is complete, and particularly, how concealment or stealth will be extended with the modification. The visual simulation shall depict to scale the eligible support structure in relation to the trees, landscaping and other structures adjacent to, or in the immediate vicinity of, the eligible support structure. The applicant may substitute alternate documentation and analysis if, in the reasonable discretion of the County, it provides similar detail and description of the proposed modification as set forth in this subsection.

C. Wireless Communication Facilities (WCF) including SWFs. Applications for SWFs may be submitted in batches of applications. In addition to the application materials delineated in subsection A of this section, a complete application for a SUP for a WCF (including SWFs) includes:

1. A description of compliance with the applicable design and performance standards set forth in TCC 20.33.1300. This includes, but is not limited to:

a. A scaled site plan clearly indicating, to the extent applicable, the location, type and height of the proposed facility or collocation, on-site land uses and zoning, adjacent land uses and zoning, comprehensive plan classification of the site, proposed means of access, setbacks from property lines, spacing between tower(s) and other structures, elevation drawings of the proposed tower and any other structures, topography of the site, and proposed parking;

b. Legal description of the parent tract and leased parcel, if applicable;

c. A landscape plan showing specific landscape materials, if applicable;

d. Method of fencing, the finished color, and the method of camouflage and illumination, if applicable;

e. If new equipment cabinets, generators, or any other ground equipment components are being proposed:

i. A description of the method of concealment of equipment components, such as: whether such components will be located within an existing building, within an architecturally compatible addition to an existing building, or within a new building which is architecturally compatible with other buildings on the site and adjoining properties; located underground; or within an equipment cabinet or shelter; and

ii. If equipment is proposed to be concealed within an equipment cabinet or shelter that will be located aboveground (and not mounted on or within the structure itself), a description of the landscaping and screening, if technically feasible; and

2. A description of compliance with the additional requirements in this chapter for collocating and for special uses subject to a Type III review, if applicable.

~~DE~~. New Towers. In addition to the application materials delineated in subsection A and ~~CD~~ of this section, a complete application for a SUP for a new tower includes:

1. An attestation from the applicant as to whether construction of a new tower will accommodate collocating of additional WCFs for other service providers.

2. For information purposes only and to assist the County in understanding the expected benefits of the site, but not to be considered as the criteria for approval, include ~~A~~ an explanation of how the proposed new tower at the proposed location is necessary to either fill a significant gap in service, to introduce new services, to densify a network, or to otherwise improve service capabilities. Include applicable coverage maps, data, or documentation.

3. A description of the lack of suitability of the use of existing facilities, including towers or other structures to provide the services through the use of the proposed new tower.

4. Photo simulations of the proposed tower from adjacent residential properties and rights-of-way at varying distances; and

5. A statement in a form approved by the County attorney signed by the WCF applicant and the property owner of the proposed site agreeing:

a. To the collocation of additional wireless service providers on the applicant's structure or within the same site location;

b. That the applicant will remove all facilities and related equipment if the site is abandoned as a result of discontinued use for six months; and

c. That if the applicant fails to remove the facility within ninety days after notice of abandonment by the County, responsibility for removal shall fall upon the landowner (see TCC 20.33.180).

~~EF~~. Third-Party Radio Frequency Emission Review. The County may submit the applicant's materials to a third-party RF professional for review, as may be reasonably deemed necessary by the County to determine compliance with this chapter and federal regulatory requirements.

~~FG~~. Fee. Every application made under this section must be accompanied by an application fee, which will be set by the Board of County Commissioners in its unified fee schedule, to reimburse the County for the costs of reviewing the application, including any third-party review required by the County. Permits for WCFs that attach to County structures (such as a utility pole), or are located within the County rights-of-way, may be subject to additional fees related to the attachment and use of property owned or controlled by the County.

Commented [ksf33]: While this language tracks that of the FCC, we are concerned about the request for the various items of information contained in this subsection. Each of these items (filling a "significant gap," densifying a network, etc.) is helpful and interesting information for the County to have, but failure to prove that a proposed site will do any of these things is not grounds for rejection under federal law. In other words, a local government may not deny a permit on the basis that deployment will not fill a significant gap or demonstrate that it will improve service capabilities, etc. If you include these categories as "standards" or criteria it suggests to decision makers that they get to consider it the information provided and deny an application if the information is not sufficient. We recommend possibly clarifying that this requirement is for informational purposes only and is not the criteria for a decision.

Commented [KN34]: The County is strictly limited in its' ability to regulate RFE. It cannot require standards beyond the limitations set by the FCC. The County can require independent RF testing to verify the FCC limits, but it would need to be funded by the County. There is more information on RF also noted as a comment under draft TCC 20.33.150.

~~G.H.~~ Waiver of Submittal Requirements. The approval authority or their designee may waive any submittal requirement upon determination that the required submittal, or part thereof, would prohibit or have the effect of prohibiting wireless communications or is otherwise not needed for review for compliance with this chapter. It is the intent of the County that waivers authorized under this section will only be used in rare occasions based upon unique, site specific factors. A waiver, to be effective, must be in writing and signed by the approval authority.

Commented [KN35]: This sort of language is intended to support the County decision making process if the code becomes out of compliance with FCC updates.

20.33.070 Permit approval process.

A. Wireless Communication Facilities (WCF) Permits. The review process for WCF applications is that for a Type I Procedural Review (Ministerial Decision) special use permit (SUP) as detailed in 20.60.020(1) or a Type III (Quasi-Judicial Decision) special use permit (SUP) as detailed in 20.60.020(3), as determined by Table 1 of Chapter 20.54

B. This permit approval process does not apply to eligible facility requests.

20.33.080 Permit review criteria.

A. In evaluating a permit application under this chapter, the decision-maker must examine the following criteria:

1. Whether all requisite licenses, certificates, and authorizations from applicable federal, state, and local agencies have been obtained by the applicant; and
2. Whether the applicant has shown that its² proposed WCF meets the standards and criteria set forth in this chapter, including the design and performance standards set forth in TCC 20.33.130; ~~and~~
- ~~3. Whether the applicant has shown that its proposed WCF meets any additional requirements in this chapter for collocating or wireless special uses as set forth in TCC 20.33.140, if applicable.~~

Commented [KN36]: This was deleted because those standards were consolidated under 20.33.130, which is referenced in (2).

B. Decision. After considering all information submitted, and the record on file and from any hearing, the approval authority or their designee will decide whether to grant, deny, or grant the permit with conditions, and must issue a written decision containing findings of fact supported by substantial evidence, based on the criteria above.

C. Issued Permit. Any permit that is issued for a WCF under this chapter must contain the location, nature, and extent of approved use, together with all conditions that are imposed. If, at any time, the use no longer complies with the stated conditions, the owner will be declared in violation of this chapter and brought into compliance under Title 26 TCC.

20.33.090 Permit review criteria for special uses subject to type III review.

Commented [KN37]: Like other sections, there is some flexibility with this language, but it's on a case by case basis.

A. In addition to the general criteria for approval uses set forth in this chapter, the following criteria apply to all WCFs denominated as special uses subject to Type III review:

1. The applicant must demonstrate that visual, noise, and other impacts associated with the proposed WCF have been minimized to the maximum extent feasible using existing concealment technology, site design, noise abatement techniques, concealment, disguise, camouflage, or the use of architecturally compatible improvements to existing structures where permitted, or underground placement of ancillary equipment. In evaluating the site design, consideration will be given to whether the facility will blend into the surrounding topography, tree coverage, foliage, and other natural features and whether locating the facility in alternative locations upon the subject property, or reasonably available properties would better conceal the facility through use of existing natural and built features;
2. The applicant must demonstrate compatibility of the proposed WCF with the height and mass of existing buildings and structures in the area and/or compatibility with the natural setting;
3. The applicant must demonstrate that the design of the proposed facility complies with the purpose and intent of this chapter, including, but not limited to, the design and performance standards set forth in TCC 20.33.130 which most closely match the proposed facility;
4. The applicant must demonstrate that alternative locations, including other collocations and alternative support structures, are not available for the proposed facility; and
5. The applicant must demonstrate that the proposed facility will be supported by adequate public facilities or services and will not adversely affect public services to the surrounding area, or conditions can be established to mitigate adverse impacts on such facilities.

20.33.100 Completeness review.

A. Completeness Review. Applications to site small wireless facilities must be reviewed for completeness within 10 days of receipt; all other WCF applications must be reviewed for completeness within 30 days of receipt. If the application is not reviewed for completeness within the applicable time frame, it will be deemed complete.

B. Tolling. For the initial submittal of applications to site small wireless facilities, the review period resets once an applicant submits its additional materials. For all other applications deemed incomplete and where notice is provided in accordance with subsection A above, the review period is tolled until additional required materials are submitted, and upon receipt of such materials, the review time frame begins to run again.

C. Submittal of Additional Materials. If an applicant submits additional materials, the approval authority must provide notice within 10 days as to any additional materials identified in the original notice that were not provided with the supplemental materials. Second or subsequent notices of incompleteness may not specify missing documents or information that was not delineated in the original notice of incompleteness. For second or subsequent notices of

Commented [KN38]: The language in this section is consistent with the FCC requirements.

incompleteness, the review time frame will be tolled for all applications including for siting small wireless facilities. If the applicant does not submit the required materials within one hundred twenty (120) days, the County may notify the applicant that the application shall be deemed withdrawn.

D. Failure to Act. As required by 47 CFR § 1.6100(c)(4), if the decision-maker fails to approve or deny a request seeking approval for a special use permit within the applicable time frame for review, accounting for any tolling, the request is deemed granted. The deemed grant does not become effective until the applicant notifies the applicable reviewing authority in writing after the review period has expired that the application has been deemed granted.

20.33.110 Time frame for review.

A. The time frame for review of an application for a WCF begins to run when an application is submitted, not when the application is deemed complete. [Written decisions are due within the time stated unless otherwise tolled pursuant to TCC 20.33.100.](#)

1. Eligible Facility Request.

a. Time Frame. Written decision due within 60 days from receipt of submission of application.

b. If the County finds that the application involves a substantial change, the County may deny the application.

2. Collocating WCFs on an Existing Structure.

a. Time Frame. Written decision due within 90 days from receipt of submission of application.

b. This provision does not apply to small wireless facilities.

3. WCF with a New Structure.

a. Time Frame. Written decision due within 150 days from receipt of submission of application.

b. This provision does not apply to small wireless facilities.

4. Collocating Small Wireless Facilities on an Existing Structure.

a. Time Frame. Written decision due within 60 days from receipt of submission of application.

5. Small Wireless Facility with a New Structure.

a. Time Frame. Written decision due within 90 days from receipt of submission of application.

Commented [CM39]: While local governments must comply with the FCC's shot clock rules (how many days before a decision must be made before an application is deemed automatically approved), they also have the authority to toll or "pause" the shot clock if applications are incomplete and request more information from the applicant. It is important to add language referencing these "pauses" here in order for the County to retain maximum authority allowed under the law, and so that County staff know when and under what circumstances they can pause the shot clock.

Commented [KN40R39]: That being said, the County cannot make any changes to the shot clocks or what circumstances would allow the County to pause it.

20.33.120 Appeals.

A. The decision of the approval authority or their designee is final and may be appealed directly to a court of competent jurisdiction; notwithstanding the provisions of TCC 20.60.060.

20.33.130 Design and performance standards.

All WCFs locating within unincorporated Thurston County and the Urban Growth Areas (UGAs) must comply with the following standards:

A. Standards for all types of facilities:

1. General.

a. All portions of the facility must be the minimum size necessary to support operation of the facility and the reasonable expansion of additional new technologies or frequencies, as certified by the provider.

b. Owners and operators must provide information regarding the opportunity for the collocation of facilities. Provision for future collocation may be required if technically feasible.

c. It is prohibited to use any tree as a support structure for any attached WCF or to use any tree to attach any transmission equipment for any WCF.

2. Antennas (including small wireless facilities).

a. Except for macro tower sites, antennas must either be flush mounted within 12 inches of the support structure, or within 12 inches of the face of the building they are attached to; or be contained in a canister that is a continuation of the support structure and is centered on top of the support structure.

b. All antennas or arrays must be a color and material that matches the support structure, to the extent technically feasible.

c. Roof-mounted installation is permitted when the screening requirements below have been met. The antennas, mounting brackets, and any concealment structures are exempt from the height limit of the underlying zone to the extent that the total height of such facilities does not increase the overall building height by 28 feet, or 50 percent of the original building height, whichever is less.

3. Equipment Cabinets, Shelters, and Undergrounding.

a. All equipment necessary for the operation of the facility must be concealed, either within an existing building, within an architecturally compatible addition to an existing building, or within a new building which is architecturally compatible with other buildings on the site and adjoining properties; or located underground, with exceptions as stated in TCC Chapter 13.84, or located within pole structures

Commented [KN41]: There isn't much flexibility in language around appeals because of the shot clocks.

Commented [CM42]: As mentioned above, design and aesthetic standards are arguably the area where local governments retain the most authority, so long as the requirements do not have the effect of inhibiting a provider's ability to provide wireless service. The County has the authority to require design standards specific to wireless infrastructure, and to deny infrastructure that fails to meet those standards (with limitations).

We generally recommend requiring that wireless infrastructure be "concealed" as defined by the FCC rather than only "camouflaged" where feasible. By requiring concealment in all feasible circumstances, the County will retain greater authority to deny future EFR applications, because a modification to an existing structure that defeats concealment would not qualify as an EFR.

In order to promote the most flexibility to the County and the ability to adapt quickly to changing conditions, we also generally suggest a code provision noting that the Director has the authority to adopt administrative standards addressing design requirements. This allows for flexibility as technologies change, and avoids the lengthy process of getting changes approved by elected bodies. Some communities prefer this and others prefer to keep all design requirements in the code.

or in pole mounted equipment, and any which may be underground, or ground mounted, and landscaped and screened pursuant to the County's typical landscaping requirements.

b. Underground shelters are not allowed where such shelters would interfere with existing uses of public land including, but not limited to, public rights-of-way.

c. Equipment cabinets and shelters may be permitted upon abutting private property located within public rights-of-way, or public utility easement, pursuant to the applicable requirements and obtaining the appropriate permits specified in TCC Chapters 13.56 and 13.60.

d. Prefabricated concrete and metal structures for equipment enclosures are not permitted unless treated with a facade giving the appearance of masonry or wood siding and are compatible with the existing neighborhood and surrounding setting.

4. Camouflage and Concealment. All WCFs and any related accessory equipment shall, to the maximum extent possible, use concealment design techniques, and where not possible utilize camouflage design techniques. Camouflage design techniques include, but are not limited to using materials, colors, textures, screening, undergrounding, landscaping, or other design options that will blend the WCF to the surrounding natural setting and built environment.

a. Where WCFs are located in areas of high public visibility, they shall, where physically possible, be designed to be concealed, and where not possible to be concealed, to minimize the WCF profile through placement of equipment fully or partially underground, or by way of example and not limitation, behind landscape berms. Except for small cell facilities, facilities on private property that are not concealed must be screened through the use of mature trees that are a minimum of 20 feet tall and planted to screen at least 80 percent of the area around the facility, if technically feasible.

b. A concealment design may include the use of facilities designed to resemble an object that would be commonly found in the area, including, but not limited to, a flagpole, a clock or bell tower, a tree that is a native conifer species, a silo, or for SWFs, a facility that fully encloses antennas and equipment. Antennas, to the maximum extent feasible, must be concealed by the support structure, so as not to be recognized as WCFs.

c. All WCFs, such as antennas, vaults, equipment rooms, equipment enclosures, and towers shall be constructed of non-reflective materials (visible exterior surfaces only).

Commented [CM43]: As mentioned above, this requirement retains the significant authority the County has to address aesthetics.

5. Noise

Noise reduction measures must comply with applicable County or Washington state noise regulations.

6. Landscaping

- a. Except when located in the rights-of-way or on a rooftop, WCFs and equipment cabinets must be concealed by surrounding with a minimum of four-foot-wide landscaping, in the applicable zones set forth in the County's general zoning provisions, if technically feasible.
- b. Towers must be landscaped with a buffer of plant materials that effectively conceal and screen the view of the tower compound from properties used for residences, if technically feasible. In some cases, natural growth around the property perimeter may provide a sufficient buffer.
- c. Existing mature tree growth and natural landforms on the site must be preserved to the maximum extent possible.

7. Setbacks

- a. In residential zones, towers, antennas, monopoles, other wireless facilities, and equipment pertaining thereto must not be closer than the greater of the minimum building setback or 100 percent of the tower height from the adjoining lot line.
- b. In nonresidential zones, facilities must comply with the setback requirements set forth in the applicable zoning code, TCC Title 20.07. If land in a nonresidential zone abuts a residential zone with an incompatible use, facilities must not be closer than the greater of the minimum building setback or 100 percent of the tower height from the adjoining lot line.
- c. Reduction in setbacks is allowed as follows:
 - i. If the applicant uses visual or noise abatement techniques, such as decorative noise walls, to achieve equivalent or greater reduction of visual and noise impacts from the WCF.
 - ii. If the tower is constructed with breakpoint design technology. If the tower has been constructed using breakpoint design technology, the minimum setback distance shall be equal to 110 percent (110%) of the distance from the top of the structure to the breakpoint level of the structure, or the applicable zone's minimum side setback requirements, whichever is greater. (For example, on a 100-foot tall tower with a breakpoint at eighty [80] feet, the minimum setback distance would be twenty-two [22] feet [110 percent of twenty (20) feet, the distance from the top of the tower to the breakpoint] or the minimum side yard setback requirements for that zone, whichever is greater.) Provided, that if an applicant proposes to use breakpoint design technology to reduce the

Commented [CM44]: Setbacks are not directly addressed under FCC regulations. Federal statute and FCC regulations require that local governments may not promulgate or enforce regulations that "prohibit or have the effect of prohibiting" wireless service (47 U.S.C. 253(a)), and in certain cases, setback requirements can result in effective prohibition of wireless service. The current standards here are similar to the ones we have seen in many communities, and we recommend not increasing the setback requirements.

required setback from a residence, the issuance of building permits for the tower shall be conditioned upon approval of the tower design by a structural engineer.

iii. Where mature vegetation within the otherwise applicable setback affords visual mitigation

d. For substantial changes to existing WCFs, new equipment associated with the facility must be placed no closer to existing residential uses than any existing equipment enclosure on the subject property.

e. These setback requirements do not apply to SWFs in the ROW.

8. Spacing

a. Any new pole for an alternative tower structure or SWF in the rights-of-way shall be separated from any other existing WCF facility by a distance of at least six hundred (600) feet, unless the new pole replaces an existing traffic signal, street light pole, or similar structure determined by the County.

~~b. These spacing requirements do not apply to SWFs in the ROW.~~

be. The minimum spacing requirements herein will not apply if they prohibit or have the effect of prohibiting wireless communication.

Commented [CM45]: Spacing has similar issues to setbacks—some spacing requirements could be found to result in an effective prohibition of wireless services. These standards are similar to those we have seen in other communities and we do not think they would have the effect of prohibiting service.

Commented [KN46]: This is being deleted because it was determined to be specifically meant for facilities in the rights-of-way.

B. Additional Standards for Specific Types of Facilities:

1. New Towers and Concealed Support Structures

a. Any wireless applicant that proposes to construct a new tower or concealed supported structure, including lattice and guy towers, must show that:

i. The proposed tower or structure has been designed in a manner that will allow for the collocation of at least one additional antenna array on the structure, if technically feasible;

ii. The height of the tower or structure may not exceed 180 feet, or the height of similar structures permitted in the zone within which it is located, whichever is greater; and

iii. These standards do not apply to SWFs in the ROW.

b. In zones that allow residential uses, towers and their antennas must not be closer than 200 feet or 100 percent of the tower height from the nearest residential dwelling(s), as measured from the closest point from the exterior of the dwelling to the WCF, whichever is greater.

2. Lattice Towers and Guy Towers

In addition to the requirements of (1), Lattice Towers and Guy towers shall meet the following:

a. Color. Towers shall have a nonglare finish, painted to match or be compatible with the sky or trees with a non-glare paint, unless a different color or finish is required by the FCC or FAA;

b. Camouflage. Cables on lattice and guy towers that would be visible from public rights-of-way and residential property must be contained in conduit colored to blend in with the tower, as determined by the approval authority or their designee. The approval authority may allow a different color or waive the requirement if a matching conduit is not available. In addition, lattice and guy towers shall be located, designed, and screened to the extent feasible to blend with the immediate surroundings so as to reduce visual impacts.

i. Proposed lattice and guy towers shall be located where their visual impact is least detrimental to views of recognized landmarks, such as, but not limited to, Puget Sound, Nisqually Valley, Mount Rainer, the Black Hills, and the Olympic Mountains. If the approval authority determines that the proposed location for the tower would have a significant detrimental impact on a view of a recognized landmark, the approval authority shall deny the proposal unless the applicant demonstrates that a less impacting site is not available or feasible.

ii. Lattice and guy towers shall be sited off ridgelines unless they are designed to blend in with the surrounding environment in such a manner that they would not have a significant visual impact, as determined by the approval authority, or the applicant demonstrates that no alternative location is available or feasible; and

c. Setbacks from specific uses

i. Residential Properties: Lattice towers and guy towers shall be setback from all adjacent residentially owned properties a distance no less than two feet for every foot of tower height or no less than one foot for every one foot of tower height if the tower is of a camouflaged design.

ii. Other properties: Lattice towers and guy towers shall be set back from all rights-of-way and adjacent properties a distance no less than one foot for every foot of tower height.

iii. Distance from other towers. No new lattice or guy towers may be constructed within one thousand three hundred and twenty feet of any other lattice or guy tower.

3. Collocating WCFs.

a. Collocations (as defined in TCC 20.03.040(~~C~~)) are permitted on existing monopoles and stealth support structures, so long as the collocation maintains the appearance of the existing structure and does not interfere with the County's placement of cameras or other public safety uses.

b. The height of the existing WCF may be increased by the minimum vertical separation necessary between the antenna facilities, not to exceed 20 feet, except for towers and utility poles outside public rights-of-way, the height of which may be increased by up to 30 feet to accommodate the minimum separation requirement. The height of the existing facility with all increases in height due to collocations may not exceed the general height limitation for similar structures or buildings within the zone in which it is permitted or 120 feet, whichever is greater.

c. Existing monopoles and antenna support structures may be replaced to accommodate collocation. Replacement monopoles and stealth support structures must, to the maximum extent feasible, be located within 20 feet of the existing structure within the public rights-of-way, or within 30 feet of the existing structure outside of the public rights-of-way, and maintain the design of the original structure, including any stealth or camouflage components. Collocations shall adhere to minimum required property lines and residential setbacks.

d. All antenna support structures permitted pursuant to the terms of this chapter or otherwise located within the County must be made available for use by the owner or initial user thereof, together with as many other wireless service providers as can be technically collocated thereon. If the County is the structure owner, it may charge associated application fees and rental rates associated with collocated structures, to the extent allowed by applicable law.

e. Collocating facilities must meet all other visibility and performance standards.

4. Collocating WCFs within Public Rights-of-Way. In addition to the requirements of (3), Collocations within the rights-of-way shall meet the following:

~~a. Monopoles located within public rights of way must be located a minimum of 500 feet apart; a shorter distance may be approved if the applicant submits an engineering analysis and equipment specifications that demonstrate the reduced distance is necessary to provide adequate coverage and capacity.~~

ab. Where a facility located upon a monopole or utility pole requires vertical separation between its facilities and the antenna(s), the structure/pole and antenna may be raised or replaced with a taller structure to accommodate the minimum

Commented [KN47]: This was deleted because macro facilities are currently not proposed to be allowed in the ROW. This is stated under 20.33.020 Prohibited Locations.

separation requirement, not to exceed 20 feet in the public rights-of-way. Any additions must be constructed of similar materials and have surface treatments which match the color and texture of the original facility to the extent technically feasible.

5. Electric Transmission Towers or Utility Poles Outside Public Rights-of-Way

a. Where a utility located upon the support structure (such as an electric transmission tower) requires vertical separation between its facilities and the antenna(s), the structure/pole and antenna may be raised by a mount or replaced with a taller structure to accommodate the minimum separation requirement, not to exceed 30 feet. Any additions must be constructed of similar materials and have surface treatments which match the color and texture of the original facility to the extent technically feasible.

6. Playfield, Ball Field, and Stadium Light Mounted Facilities

~~a. So long as they meet the requirements of the applicable zone district,~~ WCFs are permitted on any playfield, ball field, or stadium light. Where lighted signs and illuminated areas are permitted, such illuminating devices must be shaded and directed so as to minimize visibility from any residentially zoned property.

Commented [KN48]: This is just to clarify that this was not meant to be a blanket approval.

7. Amateur Radio (“Ham” Radio)

a. Antennas and support structures used primarily for federally licensed amateur (“ham”) radio activities may exceed the maximum allowable height for buildings provided that:

- i. The proposed structure height is necessary to successfully engage in amateur radio communications; and
- ii. The height must be no more than the distance from the base of the antenna to the property line.

8. Attached to buildings

a. Maximum Height. Attached wireless communication facilities or antennas shall not exceed 28 feet in height above the building roof or top of an existing structure on which it is mounted.

b. Wall Mounted. If the antenna is mounted on a wall, it shall be as flush to the wall as technically feasible.

c. Architectural Compatibility, Screening and Camouflaging. The antenna shall be architecturally compatible with the building and wall on which it is mounted, and shall be constructed, finished, or fully screened to match as closely as possible the color and texture of the building and wall. Such facilities will be considered architecturally and visually compatible if they are camouflaged to disguise the WCF or designed to blend with the building on which it is mounted.

d. Equipment Structures. Equipment structures mounted on a building roof shall either be hidden from view from ground level off-site or have a finish/texture similar to the exterior building walls. Equipment for an attached antenna may also be located within the building on which the antenna is mounted. Any ground equipment that is not buried shall be located and screened to minimize visibility from adjacent properties and rights-of-way.

e. Signals, Lights, and Signs. If lights are necessary, they shall be of a type that has the least visual impact for people at ground level, as determined by the approval authority or their designee.

f. Outdoor Storage. Outdoor storage of motor vehicles or materials associated with the wireless communication facility is prohibited.

20.33.140 Maintenance of facilities.

The owner or operator of all wireless communication facilities must maintain their facilities in a good and safe condition and in a manner which complies with all applicable federal, state, and local requirements.

20.33.150 Radio-Frequency (RF) emissions.

A. All wireless communication facilities must comply with applicable Federal Communications Commission (FCC) regulations regarding radio-frequency emissions. Compliance with applicable federal laws and regulations shall be a condition of any permit issued under this chapter.

B. If the County determines that a WCF site is exceeding federal limits of RF emissions, it may notify the site owner or operator and require that the site be brought into compliance. Failure of a site owner or operator to maintain compliance with federal RF standards may result in the County's taking any compliance action available under applicable law.

20.33.160 Testing of facilities required – Noise emissions.

A. The owner or operator of a wireless communication facility must conduct tests necessary to demonstrate compliance with all applicable local regulations regarding the noise emissions of the facility when notified in writing (not more than 3 times a year) by the approval authority or their designee that a noise complaint has been received regarding the facility. All such tests must be performed by or under the supervision of a licensed environmental noise consultant competent to perform such tests and interpret the data gathered.

B. When such a report is required, a report, certified by a licensed environmental noise consultant, setting forth the observed noise levels at the property line of the property upon which the facility is located must be submitted. The report must account for background noise and other noise sources and demonstrate the noise levels emitted by the facility, including any air conditioning or ventilation equipment contained therein. Such report must address standards set

Commented [CM49]: As we have discussed, this is an area where local governments have very little authority. Generally, the County can only require that providers adhere to FCC standards and cannot require them to adhere to higher standards, or to provide documentation related to compliance such as periodic RF testing, that is not required by the FCC. The FCC regulations do not say this specifically. Our opinion on this issue stems from our review and understanding of the caselaw that has developed on this issue.

There has been some community discussion involving outside legal counsel that argued the FCC's RF standards were suggestions and the County is not held to those standards. Kissinger & Fellman Associates stand by that It is settled as a matter of law that only the FCC can regulate RF emissions; the most local governments can require is evidence of such compliance. Generally, we recommend requiring a signed report by a qualified RF engineer demonstrating that planned wireless infrastructure falls within FCC RF standards.

There have also been comments stating that the DC Circuit Court of Appeal's decision in Environmental Health Trust v. FCC means that the FCC's RF regulations have been overturned. This is untrue. The Court rejected the FCC's RF order and remanded the matter back to the FCC for further consideration. This means that the FCC's current RF regulations remain in place until such time that the FCC institutes a new rulemaking and promulgates new regulations related to RF—which will likely take years, and it is not guaranteed that the standards will change.

Commented [KN50R49]: Some edits were made to this comment to more accurately differentiate concerns from the community members of the stakeholder committee compared to public comment in general.

forth within noise reduction measures under State law in RCW 70A.20.060 and under any applicable standards in Thurston County code.

C. The approval authority or their designee may retain a technical expert in environmental noise measurement to verify the noise measurements and certification. The cost of such a technical expert must be borne by the owner or operator of the facility, if said facility fails to comply with applicable state or local noise standards.

D. This section does not apply during the testing of alternative power sources (i.e., power generators).

20.33.170 Public safety.

A. All wireless communication facilities must be protected from unauthorized entry and be constructed and maintained in a manner that will preclude unauthorized individuals from climbing structures housing WCFs. The perimeter of all WCFs that include an antenna support structure, other than SWFs in the ROW, must be secured with security fencing which does not exceed seven feet in height. WCFs that do not include an antenna support structure must be protected from unauthorized entry through appropriate means approved by the approval authority or their designee on a case-by-case basis consistent with the purpose of protecting the public health, safety, and welfare.

B. Adequate public safety measures shall be provided for wireless communication facilities (except for small wireless facilities), as determined by the approval authority.

C. The county shall require remedial action by the owner, operator, or applicant, if it determines that structural failure, ice accumulation, or other conditions pose a risk to public safety.

20.33.180 Abandonment and removal.

A. Any WCF that has had no antennas mounted upon it for a period of six months, or if the antennas mounted thereon are not operated for a period of six months, will be considered abandoned, and the owner thereof must remove such structure and any accompanying equipment and enclosure within 90 days after receipt of a notice from the approval authority or their designee to do so. The approval authority may extend this time period to a maximum of six additional months.

B. Notwithstanding the requirements in subsection A above, a site will not be considered abandoned under this section if the owner or operator of the WCF demonstrates the following:

1. Within 14 days of the approval authority's notification to remove, an explanation of how there is a reasonable likelihood that the site will again be used within 90 days of the approval authority's notification to remove; and
2. Within 90 days of the approval authority's notification to remove, demonstration that the owner or operator has in fact resumed use of the WCF, as previously permitted.

Commented [KN51]: This was questioned during a Planning Commission work session. The reason it excludes SWFs in the ROW is because this specific language is talking about security fencing, which wouldn't be necessary with that type of facility.

C. The owner or operator of all wireless communication facilities must, when requested by the approval authority or their designee, submit a written report, signed under penalty of perjury which demonstrates whether there has been a cessation in use of the facility for a period of six months during the prior year. If a WCF is not removed within 90 days after receipt of a notice from the approval authority requiring said removal, the county may seek and obtain a court order directing such removal and imposing a lien upon the real or personal property upon which such WCF is situated in an amount equal to the cost of removal, and seek all remedies available under Title 26. If more than one wireless service provider is using the WCF, it will not be considered abandoned until all such users cease using the structure as provided in this section.

20.33.190 Signs.

A. Except as approved as part of a plan to conceal, disguise, or camouflage a wireless communication facility, no signs, symbols, flags, banners, or similar devices must be placed on, attached to, painted, or inscribed upon any antenna support structure or alternative antenna support structure. Notwithstanding the foregoing, an applicant or landowner may place not more than four signs measuring 12 by 18 inches upon or near a wireless communication facility which:

1. State that trespassers may be prosecuted; and
2. Identify the applicant or landowner or person responsible for operating the wireless facility, with names and telephone numbers of persons to be contacted in the event of an emergency; and
3. Contain information necessary and convenient for the person operating the wireless communication facilities to identify the wireless communication facility; and
4. Nothing in this section may be construed to prohibit the placement of safety or warning signs upon any portion of the wireless communication facilities which are required by law or which are designed to apprise emergency response personnel and the employees and agents of wireless communication providers of hazards associated with equipment located upon the wireless communication facility.

20.33.200 Lighting standards.

Except as specifically required by Federal Aviation Administration (FAA) or FCC regulations, antenna support structures cannot be illuminated. However, equipment enclosures may be illuminated for security reasons when compatible with the surrounding neighborhood.

20.33.210 SEPA.

Integration of Environmental Review. An application for a WCF that is not exempt from review under the State Environmental Policy Act (SEPA) must be reviewed per TCC Chapter 17.09 concurrently with the review of the permit reviewed under this chapter.

20.33.220 Adjustments to Standards

Commented [CM52]: While this section references Washington's environmental review statute, various stakeholders have suggested requiring wireless providers to complete a "NEPA Checklist" to demonstrate compliance with the National Environmental Protection Act, in addition to requiring SEPA review where applicable.

While the County may require an applicant to demonstrate compliance with NEPA, it may not require anything beyond a self-certification of compliance. In other words, the FCC has delegated to providers the initial assessment of whether a proposed facility is exempt from NEPA review. While it is certainly arguable as to whether this is a good policy, the FCC has the legal authority to make this delegation.

The "NEPA Checklist" that has been referenced by citizens is not applicable here, and requiring applicants to submit such a checklist goes beyond the bounds of the County's authority in this area. As a general matter, NEPA only applies to wireless sites in limited circumstances. Further, NEPA applicability to wireless facilities in the public right of way is even further restricted to a very few circumstances, most of which are not relevant to the County.

Commented [KN53]: This section is also intended to allow flexibility in review of applications as things like designs change over time.

Commented [KN54R53]: Some suggested changes provided by the County Attorney.

A. Applicability.

1. Except as otherwise provided in this Chapter, no WCF shall be used or developed contrary to any applicable development standard unless an adjustment has been administratively granted pursuant to this Section. These provisions apply exclusively to the standards under this Section. Adjustments to standards under this Chapter do not require a variance under Chapter 52 of Title 20.

2. A variance under Chapter 52 of this Title must be granted for any other adjustment sought to modify standards under all other Chapters of this Title. Except however, an administrative adjustment under this Section may be granted, and variance requirements waived, for development standards in other chapters of this Title to avoid an unnecessary burden to the siting of a WCF that would conflict with applicable federal WCF law. The decision to waive the variance requirements and grant an administrative adjustment for development standards outside of this Chapter are at the sole discretion of the approval authority or their designee.

B. Submittal Requirements. An application for a WCF adjustment shall be in a form provided by the department and shall include:

1. A written statement and supporting documentation demonstrating how the adjustment would meet the criteria in this ~~Section~~Chapter.

2. A site plan that includes:

a. Description of the proposed siting's design and dimensions, as it would appear with and without the adjustment.

b. Elevations showing all components of the wireless communication facility, and its connection to utilities, as it would appear with and without the adjustment.

c. Color simulations of the wireless communication facility after construction demonstrating compatibility with the vicinity, as it would appear with and without the adjustment.

C. Criteria. An application for a WCF adjustment shall **only** be granted if the following criteria are met:

1. The adjustment is consistent and harmonized with the purpose of the development standard for which the adjustment is sought.

2. Based on a visual analysis, the design minimizes the visual impacts to residential zones through mitigating measures, including, but not limited to, building heights, bulk, color, and landscaping.

3. The ~~applicant~~owner demonstrates to the satisfaction of the County ~~the existence of~~ either (a) or (b) below of the following:

a. ~~That compliance with this Chapter's standards would~~ The proposed adjustment is necessary and narrowly tailored specifically as follows:

i. ~~Strict compliance with this Chapter's standards would~~ Prohibit or have the effect of prohibiting the ability of the carrier to provide wireless service; and

ii. The adjustment is narrowly tailored to allow the carrier to provide wireless service, such that the wireless communications facility conforms to this Chapter's standards to the greatest extent possible; ~~or~~

b. The adjustment would minimize or eliminate negative impacts to surrounding properties and their uses, through a utilization of existing site characteristics, including, but not limited to, the site's size, shape, location, topography, improvements, and natural features. Negative impacts are minimized or eliminated as follows if there is, in the reasonable discretion of the County:

i. A decrease in negative visual impacts, including, but not limited to, visual clutter;

ii. Better preservation of views or view corridors;

iii. A decrease in negative impacts on property values; or

iv. A decrease in any other identifiable negative impacts to the surrounding area's primary uses; ~~and~~

4. The ~~applicant~~ owner demonstrates and attests that the adjustment poses no additional threat to public health, safety, and welfare.

D. Requests for a WCF adjustment shall be treated separately from the site application from which the adjustment is sought. The application fee for the adjustment request may include the costs that the County incurs in retaining outside consulting expertise that in the County's opinion, is necessary to evaluate the request.