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# COMMUNITY PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

Creating Solutions for Our Future

Joshua Cummings, Director

## **MEMORANDUM**

**TO:** Thurston County Planning Commission

**FROM:** Kaitlynn Nelson, Associate Planner

**DATE:** April 14, 2021

**SUBJECT:** Wireless Code Update, Thurston County Zoning Code Chapter 20.33

Development Code Docket #A1- Wireless Communications Considerations for April 21, Planning Commission Work Session

### **Background**

The wireless code establishes the permitting process for numerous types of wireless facilities in both the public rights-of-way and private property, the criteria for approval, and the design guidelines for each type of facility. An update to the wireless code is required for compliance with the Federal Telecommunications Act and the Federal Communications Commission (FCC), which has adopted multiple orders over the years that impose new and restrictive conditions on local control. Updating the code allows the County to preserve the ability to assert the remaining authority in the review of wireless facilities. The timeline for adoption of the draft code is based not on a calendar deadline, but on the need to fill the gap where the County does not have code in place to request any requirements beyond the determinations made by the FCC.

Staff have worked closely with consultant Ken Fellman, with Kissinger & Fellman Law Firm, who was hired by the County Prosecuting Attorney's office, and who has experience in updating wireless code, as well as actively participating in the ongoing legal updates by the FCC. The draft code is a complete rewrite, with elements of the existing county wireless code considered where applicable, as well as examples of other local codes from cities like Tumwater and Anacortes. This item has been officially docketed since 2014 at the direction of the BoCC.

Staff provided the first Planning Commission work session with a presentation by Ken Fellman on the legal considerations of the FCC on March 17<sup>th</sup>, 2021.

Wireless Code Update Development Code Docket #A1 4/12/2021

### **Affected Code**

There are several chapters within Title 20, Zoning, with proposed changes. The predominant code update applies to the complete rewrite of Chapter 20.33, Wireless Communication Facilities and Antenna Support Structures. The updates to definitions apply to Chapter 20.03, Structure, Interpretations and Definitions. Additionally, Chapter 20.54 Special Use\* includes Table 1, Special Uses – Distribution in County Zoning Districts, which must be updated to reflect changes in requirements.

Titles 21, Lacey Urban Growth Area Zoning; 22, Tumwater Urban Growth Area Zoning; and 23, Olympia Urban Growth Area Zoning have no proposed changes. Each of these titles references Chapter 20.33 for regulations and requirements.

### **Federal Requirements**

Under Section 704 (codified at 47 U.S.C 332(c)(7)) and associated Orders, local regulations shall:

- Not unreasonably discriminate among providers of functionally equivalent services.
  - *Staff Comment:* The County may not deny permits for similar wireless facilities applied for by different companies. The draft code states what requirements will be necessary from applicants and the design necessary for approval of a permit. The County can determine permit approval, as is reasonable for similar facilities.
- Not prohibit or have the effect of prohibiting the provision of personal wireless services.
  - Staff Comment: Some examples of items that can have the effect of prohibiting wireless services include setbacks and spacing minimums that create gaps in service, prohibiting services in locations that would create gaps in service, height limits and limits on other features of facilities that would go against standards for the facilities to work properly, and other design standards that have excessive requirement. However, the approval authority does have the ability to provide design criteria for those items, as is reasonable. The County may also require the provider to demonstrate that the application is for the least intrusive site, which is provided in the draft code for towers that may have an impact on specific views.
- Act on an application within a reasonable period of time after the request is duly filed.
  - *Staff Comment:* The requirements for review periods have been clearly defined by the FCC and provided in the draft code. The process for internal review of these permits will be adjusted to accommodate these requirements.
- Not regulate personal wireless service facilities on the basis of environmental effects of radio frequency emissions to the extent that such emissions comply with FCC regulations.

Wireless Code Update Development Code Docket #A1 4/12/2021

Staff Comment: The draft code provides language stating this limitation, while also stating that compliance with applicable federal laws and regulations shall be a condition of any wireless permit, and that if the County determines that a site is exceeding federal limits, it may notify the site owner or operator and require that the site by brought into compliance. Failure of a site owner or operator to maintain compliance with federal standards may result in the County's taking any compliance action available under applicable law. The County may not create any further rules or regulations on the basis of environmental effects.

• Provide in writing and support with substantial evidence contained in a written record, the decision to place, construct, or modify a personal wireless service facility.

*Staff Comment:* This requirement for decisions has been provided in the draft code.

• Allow for the approval of any "Eligible facilities request", which is a modification of an existing wireless tower or base station that is not a "substantial change" to the physical dimensions, as defined by the FCC.

*Staff Comment:* This requirement and the associated definitions are provided in the draft code. Examples of other associated definitions include tower, base station, collocate, conceal, and existing, as defined by the FCC.

## Thurston County Community Planning and Economic Department

**Community Planning Division** 

## THURSTON COUNTY

## PLANNING COMMISSION DRAFT

### WIRELESS UPDATE

Chapters 20.33, 20.03, and 22.54

Chapter: 20.03 (Attachment A)

**20.54** (Attachment B)

20.33 (Attachment C) – Repeal and Replace

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

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### 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.

- 3.6 "Alteration" means change to, addition to, or modification of an existing use or physical structure that is beyond routine repair and maintenance but does not amount to total replacement. An alteration includes activity that requires a building permit.
- 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

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.

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- 7.5 "Bare root nursery" means an areas for the cultivation and propagation of trees, shrubs, and plants which are grown in the ground and not in containers.
- 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.
  - 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.
  - <u>b.</u> The term includes, but is not limited to, radio transceivers, antennas, coaxial or fiberoptic 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.
- 7.7 "Bathroom" means a space containing a wash basin and a toilet. It may include a bathtub, or shower, or both.

- 14.5 "Buildings housing animals" means buildings, such as stables, kennels, catteries, hen houses, barns or other structures, that are designed or used to house animals.
- 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.
- 15. "Camp or recreation ground" means public or private recreational campgrounds that may include some recreational vehicle facilities, but not including travel trailer parks.

- 44.5 "Ecotourism" means environmentally responsible travel to fragile, pristine, and usually protected areas that strive to be low impact and often small scale as opposed to mass tourism. The purpose is to educate the traveler; provide funds for ecological conservation; directly benefit the economic development and political empowerment of local communities; and foster respect for nature, different cultures and human rights.
- 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. Energy Transmitting and Generation. See "Major energy transmission and generating facilities"
- 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, 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.
- 45.67 "Expansion" means alteration of a use or structure that extends beyond the existing use area or building footprint.

- 46.6 "Farm residence" means a single-family dwelling which is the primary dwelling for a farm.
- 46.8 "FCC" or "Federal Communications Commission" means the federal agency, or its lawful successor, authorized to regulate and oversee wireless services and providers.
- 47 "Feed lot" means any commercial establishment or facility commonly used for the express purpose of feeding cattle or other livestock for immediate slaughter.

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- 61. "Guest house, or rooms for guests" means an accessory use area in an attached or detached building that provides a bedroom, or areas that could be used as habitable space, and a bathroom with a shower or a tub for guests of the occupants of the primary dwelling unit. A guest house or rooms for guests will contain no kitchen or cooking facilities, or areas that could be considered as or converted to a kitchen or cooking facility.
- 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.
- 62. "Hard surface" means an impervious surface, a permeable pavement, or a vegetated roof, in contrast with vegetated permeable soils.

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- 72.1 "Kitchen" means any room principally used, intended, or designed to be used for cooking or the preparation of food. The presence of a range or oven, or utility connections suitable for servicing a range or oven, shall normally be considered as establishing a kitchen. The meaning of "kitchen" shall exclude a bar or butler's pantry.
- 72.2 "Lattice tower" means a type of support structure that is self-supporting with multiple legs and cross bracing of structural steel.
- 72.3 "Limited areas of more intensive rural development (LAMIRD)" means a zoning district containing rural development at a density exceeding one dwelling unit per five acres, established pursuant to RCW 36.70A.070(5)(d). LAMIRDs are limited to areas of development established before July 1, 1990 (the date Thurston County was required to plan under the Growth Management Act), with limited potential for infill development, and defined by logical outer boundaries.

- 86. "Mobile or manufactured home park" means an area of land, in single ownership, on which ground space is made available for the location of two or more mobile or manufactured homes. Such mobile or manufactured homes are generally owned by the occupants who pay a fee for the use of the ground space. The mobile or manufactured homes remain essentially portable and may be moved from time to time.
- <u>86.3</u> "Monopole" means a support structure that is self-supporting with a single shaft of wood, steel or concrete.

86.5 "National defense" means the measures taken by the United States or the United States in cooperation with other countries to safeguard their interests and objectives against military attacks by all enemies foreign and domestic.

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- 116. "Rifle, pistol or archery range" means a facility operated by a community, a club or a professional association for purposes of rifle, pistol or archery practice.
- 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.
- 116.5 "Rural character" means the patterns of land use and development established by the rural element of the Thurston County Comprehensive Plan:
  - (a) In which open space, the natural landscape, and vegetation predominate over the built environment;
  - (b) That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas;
  - (c) That provide visual landscapes that are traditionally found in rural areas and communities;
  - (d) That are compatible with the use of the land by wildlife and for fish and wildlife habitat;
  - (e) That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;
  - (f) That generally do not require the extension of urban governmental services; and
  - (g) That are consistent with the protection of natural surface water flows and ground water and surface water recharge and discharge areas.

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122.5 "Secure community transition facility" means a residential facility for persons civilly committed and conditionally released to a less restrictive alternative pursuant to Chapter 71.09 RCW. A secure community transition facility has supervision and security, and either provides or ensures the provision of sex offender treatment services. Secure community transition facilities include, but are not limited to, facilities established pursuant to Chapter 71.09 RCW

and any community-based facilities established under Chapter 71.09 RCW and operated by the state or under contract with the state.

- 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 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.
- 123. "Shopping center" means any group of two or more commercial uses which (a) are designed as a single commercial group, whether or not located on the same lot; (b) are under common ownership or management; (c) are connected by party walls, partitions, canopies or other structural members to form one continuous structure, or if located in separate buildings, are interconnected by walkways and accessways designed to facilitate customer traffic between the uses; (d) share a common parking area; and (e) otherwise present the appearance of one continuous commercial area.

- 127. Single-Family Unattached Dwelling Unit. See "Dwelling, Single-Family."
- 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.
- 128. "Special incinerator ash" means ash residues resulting from the operation of incinerator or energy recovery facilities managing municipal solid waste, including solid waste from residential, commercial, and industrial establishments, if the ash residues:
  - a. Would otherwise be regulated as hazardous wastes under Chapter 70.105 RCW; and

b. Are not regulated as a hazardous waste under the Federal Resource Conservation and Recovery Act (RCRA), 42. U.S.C. Section 6910 et. seq.

- 138. Subdivision, Conventional. "Conventional subdivision" means the subdivision of a lot in accordance with the lot size requirements and bulk regulations specified for same in the district regulations. (See Appendix Figure 1.)
- 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 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;
  - 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.<u>35</u> "Temporary sign" means a sign which is not permanently mounted and is displayed for no more than five months in any twelve-month period. Temporary noncommercial signs may be displayed as specified in Section 20.40.040.
- 138.<u>46</u> "Temporary use" means a use established for a specified period of time, with the intent to discontinue the use at the end of the designated time period. Refer to Section 20.54.070(41.5).
- 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.
- 138.7 "Transfer of development rights receiving area" means the area designated by Thurston County jurisdictions within which development rights transferred from a transfer of development rights sending area can be used.

- 138.11 "Transfer of development rights easement" means a legal covenant which protects the subject land in perpetuity from development beyond any development rights reserved subject to the underlying zone at the time the covenant is signed and grants enforcement of the covenant to the county.
- 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.
- 139. "Transportation terminal" means a facility which serves primarily as a transfer point for changing from one mode of transportation to another, or for transferring shipped materials from one vehicle to another, with associated storage area.

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- 141.5 "Use area" means the portion of property physically occupied or used by the land use activity.
- 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.
- 142. "Variance" means the method by which an adjustment is made in the application of the specific regulations of this title to a particular piece of property, which property, because of special circumstances applicable to it, is deprived of privileges commonly enjoyed by other properties in the same district or vicinity and which adjustment remedies disparity in privileges.

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- 146. "Winery (small scale)" means a small scale winery limited to twenty-thousand square feet in size, which utilizes fruit and berries grown in the Pacific Northwest in the production of wine.
- 146.1 "Wireless communication facility (WCF)" shall be defined in the same manner as in Title 47, United States Code, Section 332(c)(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 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.

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.

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

146.5 "Work release" means facilities providing work/training release programs as an alternative to imprisonment which are under the supervision of a court or a federal, state or local agency, including electronic house arrest program management.

### **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:** 

**Table 1** Special Uses – Distribution in County Zoning Districts

**20.54.070** Use – Specific Standards

**Table 1 – Distribution in County Zoning Districts** 

USE		•••	LTA	NA	LTF	PP	MR	AOD	• • •
• • • •	•••	•••		•••	•••	•••	•••	•••	•••
43.	Veterinary clinics								
44.3	Wireless								
	communication								
	facilities (WCFs) –		A/X	A/X			A/X		
	attached or co-located								
	collocations								
44.4	WCFs/antenna support								
	structures remote			A/X			A/X		
	freestanding								
44.6	(WCFs) <del>/antenna</del>								
	support structures-		X	X			X		
	freestanding* towers*								
45	Work release*	•••							

### 20.54.070 Use – Specific Standards

- 43. Veterinary Clinics or Hospitals.
  - a. Current construction and maintenance standards of the American Animal Hospital Association shall apply at all times.
  - b. Boarding and grooming of animals, other than that incidental to medical and surgical care, shall be prohibited.
  - c. Off-street parking requirements including screening shall be the same as those for medical and dental offices as in Chapter 20.44 (Parking and Loading) and Section

20.45.040, in Ch. 20.45 (Landscaping and Screening).

- d. Setbacks shall be as provided in Section 20.25.040(5) (arterial commercial district).
- 44.3 Wireless Communication Facilities (WCFs)/Antenna Support Structures (Including Radio and Television Towers) 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.
- 45. Work Release Facilities.
  - a. General Requirements.
    - i. The applicant shall provide verification from the Department of Corrections (DOC) that the proposed facility is in compliance with DOC standards and applicable state and local regulations.
    - ii. The site must be accessible by public transportation or an alternative transportation program, approved by the hearing examiner, must be provided to serve the needs of the facility's occupants.
    - iii. Adequate sewage disposal facilities and water must be provided without diminishing the level of service for system users or others dependent upon the resource.

### b. Location.

- i. Work release facilities shall not be located closer than five hundred feet from the boundary of a district in which the use is not allowed as a special use.
- ii. Sites accommodating people convicted of violent crimes shall be located at least one-half mile from residential districts with an allowable density of one unit per two acres or greater.
- iii. Sites accommodating work release facilities shall be located at least one mile from any school and any site for which a special use application for a school has been submitted.
- iv. Work release facilities shall be located such that law enforcement officers can respond to a call for assistance within five minutes under typical conditions.
- v. Advance life support service, as defined in RCW 18.73.030(19), must be available within five minutes under typical conditions.
- vi. The hearing examiner may lessen standards in subsections (45)(b)(i), (ii), and (iii) of this section if, in his or her opinion, a water body, freeway, or other barrier provides separation as effective as these standards.
- c. Security.

- i. The applicant shall submit a security plan, reviewed by the sheriff, which at a minimum is in compliance with applicable American Corrections Association's security standards. This plan shall identify staffing levels and scheduling, building security, monitoring programs to verify the presence of the program's participants at jobs and training programs, policies for unescorted absences, policies and penalties for violation of rules and procedures, an escape search plan, and provisions for immediate public notification of escapes and walkaways.

  ii. The applicant shall provide opportunities for community residents and local
- ii. The applicant shall provide opportunities for community residents and local law enforcement officials to participate in decisions regarding the classification of inmates to be accommodated at the proposed facility.

### d. Design.

- i. Size. Work release facilities shall house no more than fifty inmates.
- ii. Setbacks. The facility shall be set back at least seventy-five feet from public rights-of-way and property lines.
- iii. Landscaping/Buffers.
  - (A) The applicant shall submit a binding landscaping plan which serves to maintain or enhance the character of the area without jeopardizing security. This plan shall incorporate at least a twenty-five-foot landscaped buffer along public rights-of-way.
  - (B) The applicant shall install an eight-foot high fence in character with the neighborhood between the facility and all property boundaries, with the exception of the landscaped street frontage, which effectively screens the site from adjacent properties. The hearing examiner may waive or lessen this requirement if he/she determines that, due to existing site features or the type or character of adjoining uses, the privacy and security of the occupants of adjoining properties can be maintained in the absence of a fence or with a lower fence.
  - (C) Outdoor activity areas located in residential districts shall not be visible from public rights-of-way or adjacent properties.
- iv. Noise. The hearing examiner may require conditions to minimize potential noise impacts including, but not limited to, altering the location of outdoor use areas and noise generating facilities, and installation of noise reducing elements such as walls, berms, and landscaping.
- v. Lighting. Site lighting shall not produce levels of illumination or glare that would pose a nuisance or hazard for motorists on public rights-of-way or constitute a nuisance for occupants of adjacent properties.
- vi. Access. The proposed site shall have direct access to an arterial or collector, unless the hearing examiner determines that access via a lesser classification of street would not be detrimental to the neighborhood character and would not increase public safety risks.

### **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 AND ANTENNA SUPPORT STRUCTURES

### **20.33.005 - Applicability.**

The following regulations apply to wireless communication facilities (WCFs) and antenna support structures accommodating automated meter reading antennas outside of rights-of-ways, commercial or public radio, television, paging or other communication antennas, transmitters, receivers, or repeaters and related equipment and structures.

### **20.33.010 - Purpose.**

The purposes of this chapter are to:

- 1. Manage the location of WCFs, radio, television and automated meter reading antenna support structures, antennas, and equipment structures in the county by providing standards for their placement, design, construction, modification, and removal;
- 2. Accommodate WCFs, and radio, television and automated meter reading facilities operating consistent with Federal Communication Commission (FCC) guidance and meeting the standards of this chapter to serve the routine and emergency communications needs of county residents;
- 3. Protect residential, historic and other land uses, neighborhood character, aesthetic quality, property values, and the quality of life from potential adverse impacts of WCFs and other antenna support structures through careful siting, design, screening and camouflaging techniques, and by encouraging clustering of WCFs and other antenna support structures in remote and industrial areas:
- 4. Minimize the total number of antenna support structures by requiring, to the extent feasible, co-location of new facilities on freestanding and remote freestanding WCFs and other antenna-support structures;
- 5. Protect public health and safety consistent with federal, state, and local regulations; and
- 6. Avoid potential damage to adjacent properties through sound engineering practices and the proper siting of WCFs and other antenna support structures.

### **20.33.020 - Exemptions.**

The following facilities and activities are exempt from the provisions of this chapter:

- 1. Industrial processing equipment and scientific or medical equipment using frequencies regulated by the FCC;
- 2. Antennas and related equipment that are being stored, shipped or displayed for sale;
- 3. Radar systems for military and civilian communication and navigation;
- 4. Wireless radio utilized for temporary emergency communications in the event of a disaster;
- 5. Licensed amateur (ham) radio stations;
- 6. Satellite dish antennas less than two meters in diameter, including direct to home or business satellite services, when serving as an accessory use;
- 7. Routine maintenance or repair of WCFs, and radio, television and automated meter reading facilities:
- 8. A "cell on wheels" or other temporary WCF for a maximum of ninety days during an emergency declared by the federal, state or local government; and
- 9. Automated meter reading equipment and associated utility poles in rights-of-way or serving an individual residence. (See TCC 13.56 for regulations applicable to utility poles in rights-of-way).

### 20.33.030 - Prohibited locations.

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.

### 20.33.040 - Approval authority.

- 1. Freestanding WCFs/Antenna Support Structures. Freestanding WCFs and other antenna support structures shall require approval of a special use permit by the hearing examiner, in accordance with the procedures in Chapters 20.54 and 20.60.
- 2. Remote Freestanding WCFs/Antenna Support Structures. Applications for remote freestanding WCFs/antenna support structures shall be subject to the following approval process.

- a. Remote freestanding WCFs/antenna support structures that would not extend more than thirty feet above all adjacent trees within one hundred feet of the proposed-WCF/antenna support structure location and would be located more than one mile from a residential district shall require an administrative special use permit in accordance with the procedures in Chapters 20.54 and 20.60.
- b. Remote freestanding WCFs/antenna support structures that would extend more thanthirty feet above all adjacent trees within one hundred feet of the proposed WCF/antennasupport structure location or would be sited within one mile of a residential district shallrequire hearing examiner approval in accordance with the procedures in Chapters 20.54 and 20.60.
- 3. Attached WCFs, Antennas, and Related Facilities. Attached WCFs and other commercial or public antennas attached to existing structures and related equipment cabinets shall require approval of an administrative special use permit in accordance with the procedures in Chapters 20.54 and 20.60.
- 4. Co-location. Co-location on an existing WCF or other antenna support structure, including structural modifications to the existing antenna support structure to accommodate co-location, shall require approval of an administrative special use permit in accordance with the procedures in Chapters 20.54 and 20.60. However, any increase in the height of an antenna support structure that was not previously authorized by the county shall be subject to hearing examiner approval.

### 20.33.050 - Application requirements.

- 1. Requirements for All Applications. In addition to the requirements in Section 20.60.030, the following information shall be submitted as part of the application for all WCFs and other antenna support structures subject to this chapter.
  - a. If the applicant is not the landowner, the landowner(s) shall be considered co-applicant(s) and shall sign the application. If any applicant is a corporation, trust, association, or other organized group or legal entity, it shall provide the date of such creation, and, if a foreign corporation, a copy of the certificate of authority filed with the state of Washington, Secretary of State's Office.
  - b. An affidavit signed by the applicant, landowner (co-applicant), and the antenna support structure owners, if different, indicating that:
    - i. They agree to dismantle and remove the WCF/antenna support structure and restore the site to its approximate original condition within one hundred and eighty days following receipt of a letter from the county indicting that the facility is deemed abandoned or in violation of this chapter, consistent with Section 20.33.110; and,

ii. In the case of freestanding WCFs/antenna support structures, they consent to co-location, at reasonable terms, of as many antennas and related equipment as-feasible, including those of other communication providers, on the applicant's structure/site.

c. Except for a co-location proposal, evidence justifying the need for a WCF/antenna support structure in the proposed location, consistent with Section 20.33.080, and at the proposed height. This shall include, at minimum, a detailed description of the methodology used to reach the height and locational decisions.

The applicant shall submit for each WCF/antenna support structure that they own or operate within two miles of the proposed site the exact location, ground elevation, and height of the antenna support structure and antennas. The applicant shall also submit a radiated signal propagation coverage plot for each of these existing facilities. The county-may require additional information as necessary for a third party reviewer to verify the need for the proposed facilities, as provided for in Section 20.33.060.

- d. Documentation that the WCF/facility, including any back-up power generators, will-not cause noise or pollution exceeding the limits established by state law.
- e. If the applicant is also the WCF provider, proof that the applicant is licensed by the FCC, or not required to be licensed.
- f. If the applicant is not the WCF provider, proof of lease agreements with a FCC licensed WCF provider if such provider is required to be licensed by the FCC.
- g. Except for a co-location proposal, documentation, certified by a qualified engineer licensed in the state of Washington, indicating that there are no co-location possibilities as an alternative to installation of the proposed WCF/antenna support structure, consistent with Section 20.33.070.
- h. The applicant shall submit for the proposed facility a radiated signal propagation coverage plot, power density calculations expressed as micro watts per square centimeter and other technical documentation, signed by a radio frequency engineer licensed in the state of Washington, as necessary to demonstrate the proposed facility's compliance with FCC guidelines/standards for radiofrequency electromagnetic field strength. The county-may require additional information as necessary for a third party reviewer to determine compliance with the provisions of this chapter, as provided for in Section 20.33.060.
  - i. Documentation that the antennas and support structure are safe and the surrounding areas will not be negatively affected by antenna/support structure failure, falling ice, or other debris.

j. The proposed color(s) of the facility including antennas and exposed conduit.

k. In addition to the information requested on the application, the applicant shall submit the legal name, address or principal place of business, and phone number of the following:

i. The person to be contacted in the event an emergency involves the WCF/antenna support structure. (This person should be available on a twenty-four-hour basis and authorized to act on behalf of the applicant regarding an emergency situation. The applicant shall be responsible for keeping such information current); and

ii. The contact person for each WCF/communication provider that proposes installation of facilities at the site.

2. Additional Requirements for Freestanding WCFs, Remote Freestanding WCFs, and Other Freestanding Antenna Support Structures. The following additional information shall be submitted for freestanding WCFs, remote freestanding WCFs, and other freestanding antenna support structures.

a. The measured distance between the proposed WCF/antenna support structure and the nearest residentially zoned property and the nearest property with an existing residence or, in the case of WCFs or other antenna support structures proposed to be located in rights-of-way, the location of structures occupied at least three days a week and building-sites for such structures (measured to the minimum setback line specified in the applicable zoning district) within the distance equal to one hundred and ten percent of the proposed WCF/antenna support structure's height, including antennas.

b. A statement signed by the applicant stating that the WCF/antenna support structure will comply with all Federal Aviation Administration (FAA) regulations and documentation indicating whether the FAA will require attachment of a light/signal to the proposed antenna support structure.

c. A statement signed by the applicant documenting that the WCF/antenna supportstructure will accommodate the co-location of at least two additional antennas/antennaarrays for future users, or an explanation of why such design is not feasible for technicalor physical reasons (e.g., additional antennas may be inappropriate on a camouflaged-WFC). This requirement does not apply to utility poles.

d. A copy of a certified letter sent to all other licensed wireless communication providers serving the county indicating opportunities to co-locate and all responses to the letter.

- e. Documentation that adequate public safety measures will be provided, including anticlimbing devices.
- f. A statement indicating compliance with or exemption from the National Environmental Policy Act (NEPA) and all documents filed under NEPA.
- g. If the site proposed to accommodate the proposed WCF/antenna support structure is not forested, documentation showing that forested sites within one mile of the proposed site, that would afford screening of the antenna support structure from rights-of-way and adjacent properties, are not available or technically feasible.
- 3. Additional Requirements for Freestanding WCF/Antenna Support Structures. For freestanding WCFs/antenna support structures, the following additional studies/information shall be submitted:
  - a. Balloon testing shall be performed and photographs shall be submitted as follows:
    - i. A three-foot diameter, brightly colored balloon shall be flown by the applicant at the proposed antenna support structure's maximum height and proposed location. The balloon shall be flown for at least eight consecutive daylight hours between seven a.m. and seven p.m.
    - ii. Fourteen days in advance of the balloon test, the applicant shall provide notice of the test to property owners within the notice radius required for the permit and the public as specified in TCC 20.60.020(3) and inform the department of the test in writing. The notice shall include the test date, an alternate date in case of poor visibility or strong winds on the initial date, the time period when the test will be conducted, and the location.
    - iii. The applicant shall submit photographs of the balloon and site taken from the following perspectives: at the property line, at approximately one half mile from the proposed antenna support structure site, and approximately one mile from the site; all beginning at approximately true north and continuing clock wise at approximately forty five degree intervals. The department may waive this requirement where access is not possible, where there are no residences or public roads at the specified vantage points, and for sites approved for clusters of antenna support structures, provided that the proposed antenna support structure does not exceed the height of existing antenna support structures by more than fifteen feet.
    - iv. Computer simulations may be submitted to supplement, but not replace, the photographs required above.

b. If applicable, the method and color of required fencing and the method of camouflage and illumination.

### 20.33.060 - Third party technical review.

Third party review shall be required to confirm compliance with FCC guidelines/standards, as provided for in subsection (2) of this section; to verify the applicant's analysis regarding colocation, as provided for in Section 20.33.070 and when determined by the county to be reasonably warranted in order to verify the need for the requested antenna support structure's height per Section 20.33.080(6)(f).

The county also may hire third party experts, as it deems necessary, to assist with other determinations to be made in accordance with this chapter as part of the permit review process and any subsequent project monitoring. Third party review may include, but is not limited to, a review of: (1) the technical accuracy and completeness of submissions; (2) the technical applicability of analysis techniques and methodologies; (3) the validity of conclusions reached by the applicant; (4) field testing of radio frequency emissions; and/or (5) addressing other specific technical issues as identified by the county or approval authority.

The selection of the third party expert shall be by mutual agreement by the applicant and the county from a list of qualified consultants provided by the county. The cost of the third party review, testing, inspection and monitoring required by the county, consistent with the provisions of this chapter, shall be borne by the applicant or current permittee. Based on the results of the third party review, the county may require changes to the applicant's submittal or require remedial action.

### 1. Consultant Qualifications.

a. Consultants hired to conduct third party review shall have an appropriate combination of training, experience, and/or certification in one of the following fields: telecommunications/radiofrequency engineering; assessment of electromagnetic fields (e.g., a registered electrical engineer accredited by the state of Washington who holds a Federal Communications General Radio Telephone Operator License); structural engineering; and, if determined by the county to be necessary, other fields.

b. Consultants performing third party review in accordance with the provisions of this chapter shall work under the direction of the department. Copies of the consultant's report shall be made available to the applicant and the public not less than thirty days prior to any administrative decision or a public hearing before the hearing examiner regarding the proposal, as applicable. The applicant and the public shall be given an opportunity to respond to the report prior to issuance of a decision regarding the application by the approval authority.

### 2. Confirming Compliance with FCC Regulations.

- a. Proposed WCFs, radio, and television antennas, transmitters, receivers, and repeaters shall be tested by a third party as described in this subsection (2) to confirm compliance with all applicable FCC regulations/guidelines regarding radio frequency electromagnetic field exposure if:
  - i. Analysis performed by the applicant's qualified engineer indicates that existing and proposed facilities at the subject site are expected, when operating at full power, to produce radio frequency emissions exceeding five percent of the amount allowed per FCC radio frequency electromagnetic field exposure guidelines (47 C.F.R. Subsection 1.1307(b) and as hereafter amended); or
  - ii. The facilities are not categorically exempt, per FCC requirements (47 C.F.R., Subsection 1.1301 and as hereafter amended), from submission of an environmental assessment to the FCC; or
  - iii. The facilities are proposed to be located within one hundred feet of a structure occupied at least three days a week.
- b. The third party reviewer shall submit a report setting forth the following:
  - i. Measurements of existing/ambient radio frequency radiation (RFR) at the site-proposed for a new facility and at appropriate distances from it;
  - ii. An estimate of maximum RFR from the proposed facility plus existing/ambient RFR:
  - iii. Existing/ambient RFR plus estimated maximum RFR from the proposed-facility, plus the estimate of maximum RFR from the addition of co-located-facilities, if any; and
  - iv. Certification by a radio frequency engineer, stating that the RFR measurements are accurate and that measured and estimated RFR meet FCC guidelines/standards.
- c. Within thirty days of becoming fully operational, any facility requiring testing undersubsection (2)(a) of this section, shall be tested by the county or a third party reviewer, at the permittee's expense, to obtain initial field measurements of radio frequency emissions with all of the antennas at the site operating at full power. Failure to facilitate such testing shall be grounds for revoking the special use permit. A report shall be submitted to the county documenting the cumulative field measurements of radio frequency emissions and comparing the results with applicable FCC guidelines/standards.

d. The county or third party shall perform tests, at the permittee's expense, and submit a report to the department consistent with subsections (2)(b) and (c) of this section for any modification of an existing facility for which testing is required under subsection 20.33.060(2)(a) TCC that would increase its radio frequency emissions, including the activation of any additional channels. The permittee shall inform the department of such proposed modification or change in use of the facility at least five working days before it becomes operational.

e. If at any time radio frequency emission tests show that the facility exceeds any FCC standards or guidelines, the county shall notify the licensed carrier(s), the FCC, and surrounding property owners within five hundred feet. The county shall revoke the special use permit for the subject facilities upon notification from the FCC that the facilities are out of compliance with FCC guidelines/standards.

#### 20.33.070 - Co-location.

To minimize adverse visual impacts associated with the proliferation of WCFs and other antenna support structures, co-location is required, except as provided for in this chapter. The county may deny an application to construct new facilities if the applicant has not made a diligent and good-faith effort to accommodate the facilities on an existing or "applied for" antenna support structure or other suitable structure within one mile of the proposed site or one half of the proposed facility's radio frequency coverage area, whichever is greater.

1. Evaluation Criteria. An application for a WCF/antenna support structure may only be approved subsequent to a determination by the approval authority that the proposed facilities cannot be accommodated on any existing, approved or applied for antenna support structure or other suitable structure within one mile of the proposed site or one-half of the proposed facility's radio frequency coverage area, whichever is greater, for one or more of the following reasons:

a. The site is not suitable in terms of service area coverage;

b. The proposed equipment would exceed the structural capacity of all existing, approved, or applied for antenna support structures that are otherwise suitable to provide the service sought, as documented by a qualified engineer; and the existing, approved, or applied for structures cannot be reinforced, modified, or replaced to accommodate planned or equivalent equipment, or the cost of such work significantly exceeds the cost of a new antenna support structure;

c. The proposed equipment would cause interference materially impacting the usability of the current user's existing or planned equipment on the antenna support structure, as documented by a qualified engineer, and the interference cannot be prevented at a reasonable cost;

- d. Existing or approved antenna support structures cannot accommodate the planned equipment at the necessary height, as documented by a qualified engineer, or would-exceed FAA height limits;
- e. Sufficient area is not available to accommodate ground equipment;
- f. Co location/attachment to an existing structure is not available at a market rate cost. In the event that the applicant is unable to obtain a lease on an otherwise suitable structure, she/he shall document the reason(s) why that is the case; or
- g. Any other substantial reason that precludes co-location or attachment to an existing structure, as determined by the approval authority.
- 2. Burden of Proof. The burden of proof is upon the applicant to demonstrate that all reasonable alternatives to the erection of a new antenna support structure have been fully explored and are not technically or economically feasible, consistent with the criteria listed above.
- 3. Third Party Review. The county shall require independent verification third party review per Section 20.33.060, at the applicant's expense, of the applicant's analysis pertaining to unavoidable electromagnetic interference and the adequacy of the potential co-location structure's height. The county also shall require independent verification of other aspects of the analysis, at applicant's expense, that staff does not have expertise or experience to evaluate.
- 4. Waiver. The approval authority may waive co-location if she/he determines that the added tower height and facilities would significantly degrade a scenic view listed in Section 20.33.080(2)(b), violate FAA height hazard requirements, or would be impractical on a camouflaged WCF/antenna support structure.

# 20.33.080 - Location and design standards for freestanding WCFs and remote freestanding WCFs/antenna support structures.

Subsections (3) and (4) of this section do not apply to remote freestanding WCF/antenna support structures.

1. Evaluation of Alternative Sites. Prior to submission of an application for a WCF/antenna support structure, the applicant is encouraged to meet with residents of the search area for the proposed WCF/antenna support structure for the purpose of evaluating alternative sites and exploring the possibility that other technically feasible sites may be available that would be more acceptable to the community.

### 2. Siting.

a. Freestanding WCFs and other antenna support structures regulated by this chapter shall not be permitted in residential districts unless the applicant demonstrates that: a site is not available or technically feasible in a nonresidential district; and the restriction on siting antenna support structures in residential districts would have the effect of prohibiting the provision of personal wireless communication service. Residential districts include, but are not limited to, the following:

Rural-One Dwelling Unit per Twenty Acres (R 1/20), Rural-One Dwelling Unit per Ten Acres (R 1/10), Urban Reserve-One Dwelling Unit per Five Acres (UR 1/5), Rural Residential-One-Dwelling Unit per Five Acres (RR 1/5), Rural Residential/Resource-One Dwelling Unit per Five Acres (RRR 1/5), Residential LAMIRD-One Dwelling Unit per Two Acres (RL 1/2), Residential LAMIRD-One Dwelling Unit per Acre (RL 1/1), Residential LAMIRD-Two Dwelling Units per Acre (RL 2/1), Residential-Three to Six Dwelling Units per Acre (R3—6/1), Residential-Four to-Sixteen Dwelling Units Per Acre (R4—16/1), and McAllister Geologically Sensitive Area District (Title 20);

Low Density Residential District (0 – 4), Low Density Residential District (3 – 6), Moderate Density Residential District (MD), High-Density Residential District (HD), Transition Areas for Multifamily Development, Mixed Use Moderate Density Corridor (MMDC), Mixed Use High-Density Corridor (MHDC) and MGSA (Title 21);

Residential/Sensitive Resource Zone District (RSR), Single-Family Low Density Residential Zone District (SFL), Single-Family Medium Density Residential Zone District (SFM), Multifamily Medium Density Residential Zone District (MFM), and Multifamily High Density Residential Zone District (MFH) (Title 22); and

Residential One Unit per Five Acres (R 1/5), Residential Low Impact Two to Four Units per Acre (RLI 2—4), Residential Four Units per Acre (R 4—8), Residential Four to Eight Units per Acre (R 4—8), Residential Six to Twelve Units per Acre (R 6—12), Mixed Residential Seven to Thirteen Units per Acre (MR 7—13), Mixed Residential Ten to Eighteen Units per Acre (MR 10—18), Residential Multifamily Eighteen Units per Acre (RM—18), Neighborhood Village (NV), and Professional Office/Residential Multifamily District (PO/RM) (Title 23).

i. The approval authority may waive the requirement in subsection (2)(a) of this section, consistent with subsection (2)(a)(ii) of this section, if the applicant demonstrates that the proposed site would result in fewer or less detrimental aesthetic and environmental impacts than any other feasible alternative site.

ii. In no case shall lattice or guyed towers be permitted in or within five hundred feet of a residential district.

iii. If a WCF/antenna support structure is necessary in a residential district, preference among available sites shall be given to forested parcels.

iv. Radio and television towers in residential districts may be modified as necessary to comply with FCC licensing requirements.

b. WCFs and other antenna support structures shall be located, designed and screened, to the extent feasible, to blend with the immediate surroundings so as to reduce visual impacts.

i. Proposed WCFs/antenna support structures 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 facility would have a significant detrimental impact on a view of a recognized landmark, she/he shall deny the proposal unless the applicant demonstrates that a less impacting site is not available.

ii. In order to demonstrate that a less impacting site is not available, applicants for WCF/antenna support structures impacting the views listed in subsection (2)(b)(i) of this section shall identify all viable alternative sites available for accommodating the WCF/antenna support structure. The applicant shall perform balloon tests for the proposed and alternative sites, in a manner consistent with Section 20.33.050(3), and submit them for approval authority review.

iii. WCFs/antenna support structures 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.

iv. In determining whether or not a WCF/antenna support structure will have a significant adverse visual impact on a view/location listed in subsections (2)(b)(i) and (2)(b)(iii) of this section, the approval authority shall at least consider the following:

- (a) The degree to which the antenna support structure is screened by topographic features from the views listed in subsection (2)(b)(i) of thissection;
- (b) Whether trees and vegetation can be preserved in a manner that would-substantially limit the visibility of the proposed WCF/antenna support-structure from the views listed in subsection (2)(b)(i) of this section;
- (c) Whether background features in the line of sight to the proposed WCF/antenna support structure would obscure it or make it more conspicuous;

- (d) Whether the proposed design would reduce the silhouette of the portion of the WCF/antenna support structure extending above-surrounding trees, landforms, or structures; and
- (e) Whether the facility has a camouflage design.
- v. Applicants proposing uncamouflaged WCFs/antenna support structures in-locations that cannot be at least partially screened by existing trees, topography, or structures must submit documentation as to why sites which would provide screening potential are not available or technically feasible to provide adequate service. The approval authority shall deny applications for WCFs/antenna support structures in open areas (including, but not limited to, fields, prairies, or lawns without trees at least one half of the height of the proposed antenna support structure) where they would be visible from abutting public roads, public recreational areas, or residences unless the applicant demonstrates that a less visually impacting site is not available to provide service.
- vi. Unless effectively camouflaged, as determined by the approval authority, WCFs/antenna support structures shall be located on a site to take maximum advantage of the screening afforded by any existing trees, topography, and structures in order to minimize their visibility from the surrounding area, consistent with other applicable regulations. Priority shall be given (in descending order) to minimizing visibility from existing dwellings, public rights-of-way, and public parks and open spaces.
- vii. In residential and commercial districts, flush mounted antennas shall be used unless the applicant demonstrates that another mount is necessary.
- c. WCFs and other antenna support structures shall be located so they do not narrow the sidewalk width below the county's minimum standard, create a hazardous situation for pedestrians, bicyclists or motorists, or interfere with utilities, as determined by the approval authority. (See TCC Title 13, Roads and Bridges).
- d. WCFs and other antenna support structures shall be located, designed, and screened tomaintain property values and neighborhood character.
- e. WCFs and other antenna support structures shall be sited consistent with the provisions of the Thurston County Agricultural Uses and Lands Critical Areas Ordinance (Chapter 17.15 TCC), the Thurston County Critical Areas Ordinance (Title 24), and as follows:
  - i. To minimize the potential for birds to collide with towers, WCFs/antenna support structures shall not be located within one thousand 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 (64 FR 14307), listed in Title 24 TCC or Chapter 17.15 TCC as species of local importance, and as amended, or within one thousand feet of publicly owned wildlife refuges, unless the applicant demonstrates that the proposed location will not have a significant impact on such birds. Where possible, WCFs/antenna support structures shall not be located where they would interfere with migratory flyways documented by state or federal agencies.

f. Replacement utility poles in rights of way subject to this chapter shall comply with the clear zone safety guidelines in the Roadside Design Guide (2002, American Association of State Highway Transportation Officials, and as hereafter amended). Replacement utility poles shall not be located within thirty feet of an intersection, consistent with Section 20.07.070, or on the outside of a curve (in the direction of travel) with a radius of less than three thousand five hundred feet or, in the case of roads with a speed limit of fifty MPH or more, within three hundred feet of such curves.

### 3. Setbacks.

a. WCFs/antenna support structures, except those in rights of way, shall be set back from property lines a minimum of one hundred ten percent of the antenna support structure's height, including antennas.

b. WCFs/antenna support structures in rights of way exceeding eighty feet in height shall be separated from structures occupied at least three days a week and potential building sites for such structures (measured to the lot's minimum setback line) a minimum of one hundred ten percent of the proposed WCFs/antenna support structure's height, including antennas. WCFs/antenna support structures less than eighty feet in height that are located in rights of way are not subject to the setback requirements contained in this subsection (3).

- c. The setbacks required by this subsection (3) shall be measured from the base of the antenna support structure to the property line of the parcel on which it is located. Where guy wire supports are used, setbacks shall be measured from the base of the guy wire anchored to the ground, rather than the base of the tower.
- d. The approval authority may allow the setbacks required pursuant to subsections (3)(a) or (b) of this section to extend into neighboring property if it would result in a substantially better design and it accommodates any screening required pursuant to subsection (7)(d) of this section, provided that the owner of the neighboring property agrees in writing.

- 4. Separation. WCFs/antenna support structures shall be separated from one another as follows:
  - a. Within urban growth areas, freestanding WCFs/antenna support structures shall be a minimum of one thousand four hundred feet from another freestanding WCF/antenna support structure.
  - b. Outside urban growth areas, freestanding WCFs/antenna support structures shall be a minimum of two thousand four hundred feet from another freestanding WCF/antenna support structure.
  - c. Separation distances shall be measured from antenna support structure to antenna support structure regardless of property lines and roadways.
  - d. The separation may be reduced by up to fifty percent under the following circumstances:
    - i. Where the proposed freestanding WCF/antenna support structure and an existing freestanding WCF or other antenna support structure are within-substantially different view corridors, as determined by the approval authority; or
    - ii. Where the applicant clearly demonstrates that, from a technical standpoint, a reduced separation is necessary.
  - e. Freestanding WCFs/antenna support structures may be clustered within the long term-forestry district, military reservation district, and all industrial districts so long as all-WCFs/antenna support structures within the cluster are more than five hundred feet from-residential zoning districts and any property with an existing residence. WCF/antenna support structures also may be clustered on sites already occupied by an antenna support-structure if the approval authority determines that locating the facility at such a site would have less adverse impact (e.g., on the aesthetic and environmental quality of the area) than alternative sites.
  - f. The separation requirements in subsections (4)(a) and (b) of this section do not apply to effectively camouflaged WCFs/antenna support structures, as determined by the approval authority.
- 5. Co location. All freestanding and remote freestanding WCFs/antenna support structures shall-be designed and constructed to fully accommodate at least two additional WCF providers, including an area for each co-locator's equipment near the base of the tower, each comparable in-size to the area required by the applicant, unless the applicant demonstrates why such design is not feasible for technical or physical reasons (for example, because it would ruin the disguise of a camouflaged antenna support structure). This requirement does not apply to antenna support structures in rights of way.

The approval authority may require applicants to accommodate more than two co-locations, based on documented demand, consistent with the provisions of this chapter.

### 6. Maximum Height.

- a. Maximum height within urban growth areas: one hundred fifty feet including antennas.
- b. Maximum height outside urban growth areas: one hundred eighty feet including antennas, except remote freestanding WCFs/antenna support structures which may be two hundred feet including antennas.
- c. Maximum height within rights-of-way: one hundred feet, including antennas, provided that poles exceeding eighty feet in height are no more than thirty-five percent taller than the tallest utility pole on either side of the proposed pole location. The approval authority-may authorize up to an additional ten feet in height as necessary to allow adequate-separation of antennas from power lines.
- d. WCFs/antenna support structures shall be of a height that does not require installation of a flashing light or signal in compliance with FAA regulations unless:
  - i. The lights/signals are screened from view of motorists, pedestrians, and occupants of adjacent structures, consistent with FAA requirements; or
  - ii. The applicant demonstrates that the alternative locations for the WCF/antennasupport structure would also require a light/signal and would be no less visiblefrom the surrounding area than the proposed structure.
  - WCFs/antenna support structures requiring flashing lights/signals shall be allowed in residential districts only when the applicant demonstrates that there is no alternative for providing necessary service. (Also, see Section 20.33.090(5)).
- e. The approval authority may authorize WCFs/antenna support structures outside of rights of way that exceed the maximum height specified in subsections (6)(a) and (b) of this section if the applicant can show by clear and convincing evidence that the additional height is necessary to provide adequate service to the residents of the county and no other alternative with lesser impacts is available.
- f. WCFs/antenna support structures shall not exceed the minimum height necessary to provide adequate service for the communications facilities proposed, plus the height necessary to accommodate co-locations required pursuant to this chapter. The county-may require that a third party reviewer verify the justification for the requested height.

g. The approval authority shall limit the height of antenna support structures and associated antennas adjacent to public and private airports consistent with FAA height hazard requirements and adopted airport master plans.

### 7. Screening/Camouflaging.

a. Color. WCFs/antenna support structures and antennas, with the exception of camouflaged and wooded antenna support structures, shall have a nonglare finish in a gray, blue, green or other color(s) appropriate to the background against which it would be primarily viewed (e.g. green to the tree line and gray above) as determined by the approval authority, unless a different color or finish is required by the FCC or FAA.

Cables on WCFs/antenna support structures that would be visible from public rights of-way and residential property must be contained inside the antenna support structure or inconduit colored to blend in with the antenna support structure, as determined by the approval authority. The approval authority may waive this requirement if matching-conduit is not available. The approval authority also may waive this requirement for proposed WCFs/antenna support structures in rights of way if the proposed conduit would match conduit on poles along the same street within five hundred feet of the proposed pole location. Antennas shall be painted so as to appear to blend in with the antenna support structure unless it is not technically possible to do so.

- b. Pole Material. WCFs/antenna support structures in rights of way shall be limited to poles of the same design and appearance as the utility poles to which they are linked, except as required by the approval authority consistent with the Uniform Building Code.
- e. Maintenance. The permittee shall maintain the approved WCF/antenna support structure in a condition that preserves its original appearance and any concealment or camouflage elements incorporated into the design, consistent with all applicable requirements. This includes repair or replacement of equipment, removal of rust and associated stains, removal and replacement of peeling paint that would be visible from adjoining rights-of-way or property, and maintenance of required landscaping and fencing.
- d. Screening. WCFs/antenna support structures shall be located among or beside treeswherever possible.
  - i. If the site proposed to accommodate an antenna support structure is treed within fifty feet of the proposed antenna support structure's location such that substantial year-round screening of the structure and related facilities is provided, as determined by the approval authority, the applicant shall cause an easement signed by the property owner, or other instrument approved by the Thurston-County prosecuting attorney's office, establishing a tree retention buffer to be

recorded with the county auditor prior to the issuance of building permits. This buffer shall remain in effect for as long as the WCF/antenna support structure is in place. A copy of the recorded easement/instrument shall be provided to the department. The buffer shall be a minimum of fifty feet wide and shall extend around the perimeter of the facilities, excluding the access point.

The approval authority may require the buffer area to be enhanced to provide sufficient screening of ground level facilities. The buffer shall be maintained so long as the antenna support structure is located on the site. Any tree within the buffer that dies or is removed due to disease or wind throw shall be replaced during the next planting season with a minimum of two conifer trees a minimum of six feet in height at the time of planting, unless the approval authority determines that the spacing would be too close when the trees mature.

ii. If the site does not contain sufficient trees to provide effective screening, as determined by the approval authority, a minimum twenty foot wide buffer around the perimeter of the WCF/antenna support structure location, excluding the access point, shall be planted with site-obscuring conifer trees. The trees shall be planted six feet on center in at least three offset rows. The trees shall be a minimum of six feet in height at the time of planting. Planting shall occur prior to the facilities becoming operational. The required trees shall be maintained in a green and growing state so long as the antenna support structure is on the site. Any tree within the buffer that dies or is removed shall be replaced during the next planting season with a conifer tree a minimum of six feet in height at the time of planting. This requirement shall not apply to WCFs/antenna support structures in rights of way.

iii. The approval authority may modify the screening requirements in subsections (7)(d)(i) and (ii) of this section to the extent existing structures on site, existing vegetation along the parcel perimeter, or topography provide adequate screening.

The approval authority may also modify or waive those requirements, as she/he-deems appropriate, if the applicant camouflages the WCF/antenna support structure through a design that significantly mitigates its visual impact (for example, but not limited to, an antenna support structure designed to resemble a conifer tree, flag pole, clock tower, street light, or utility pole).

iv. Approval of a setback pursuant to subsection (3)(d) of this section is contingent upon the applicant submitting to the approval authority an easement or other instrument approved by the Thurston County prosecuting attorney's office from the adjacent property owner that accommodates screening required pursuant to this subsection (7)(d).

v. Unless the required trees/vegetation are planted in October or November, the applicant shall provide a watering plan indicating how the required trees/landscaping will be watered during the first two years following planting to ensure survival.

vi. The applicant shall provide a performance surety in the amount of one hundred and twenty five percent of the cost to purchase and install the required trees/landscaping. The county may draw upon these funds to the extent necessary to replace any required trees/plants that die. Prior to drawing upon the funds, the county shall notify the applicant in writing and give them at least thirty days to replace the dead/dying vegetation. The county shall release the unexpended portion of the surety two years after the date the county accepted at final inspection the installed landscaping.

e. Camouflaged WCFs/Antenna Support Structures. Camouflaged WCFs/antenna support structures shall be designed appropriate to the context, as determined by the approval authority, so they do not appear to be out of place. Camouflage proposals shall be modeled after design concepts approved by the department director or designee.

#### 8. Public Safety.

a. For freestanding WCFs/antenna support structures, a minimum six-foot high chain link fence with privacy slats shall be installed around the perimeter of the site for public safety and screening purposes. The fence and privacy slats shall be a nonreflective, deep green or other color that blends in with the surrounding environment, as determined by the approval authority. (A fence over six feet in height will require a building permit). Access to the tower shall be through a locked gate. The approval authority may authorize alternate methods of providing for public safety if a level of public safety and screening similar to that provided by the previously described fence is clearly demonstrated. These requirements shall not apply to camouflage WCFs and antenna support structures in rights of way and their associated equipment cabinets unless potentially dangerous equipment would be accessible by the public.

b. For remote freestanding WCFs/antenna support structures, adequate public safety measures shall be provided, as determined by the approval authority.

- c. All freestanding and remote freestanding WCFs/antenna support structures, with the exception of replacement utility poles, shall be fitted with anti-climbing devices.
- d. The county shall require remedial action by the responsible party if it determines that structural failure, ice accumulation, or other conditions pose a risk to public safety.

- e. A device shall be installed on all WCFs and antenna support structures that automatically stops transmission from the antennas in the event the antenna support structure falls or shifts significantly out of alignment, unless the applicant demonstrates that it is not technically feasible to do so. This does not apply to remote freestanding WCFs/antenna support structures.
- f. Foundations for replacement utility poles subject to this chapter shall require a commercial building permit.
- 9. Parking/Access. At least one parking space, plus adequate turnaround area, shall be provided. The access road, parking and turnaround areas shall have a paved, gravel or other all weather surface. The access road must be a minimum of ten feet wide. These requirements shall not apply to WCFs/antenna support structures in rights-of-way and their associated equipment structures. Approval of WCFs/antenna support structures in rights-of-way shall be contingent upon demonstration by the applicant that parking space is available for maintenance vehicles that will not obstruct vehicle travel lanes, bike lanes, or sidewalks.
- 10. Signals, Lights and Signs. No signals, lights or signs shall be permitted on a WCF/antenna support structure unless required by the FCC or FAA (also see subsection (6)(d) of this section). If lighting is required, the county shall review the available lighting alternatives consistent with FAA requirements and approve a design that it determines would cause the least impact on surrounding views. However, in documented migratory bird flyways, preference shall be given to white strobe lights operating at the longest interval allowed per FAA requirements.

WCFs/antenna support structures shall have a sign posted on the access gate with the WCF provider name and an emergency contact phone number on it. When the site is not fenced, the sign required above shall be placed in a location authorized by the approval authority. Any site security lighting shall be shielded to contain light and glare on site.

11. Outdoor Storage. Outdoor storage of motor vehicles or materials associated with the WCF/antenna support structure is prohibited outside of the fenced area installed pursuant to subsection (8) of this section.

### 20.33.090 - Design standards for attached WCFs.

The following requirements apply to attached WCFs:

- 1. Maximum Height. Attached WCFs/antennas shall not exceed twenty eight feet in height above the building roof or top of an existing structure on which it is mounted.
- 2. Wall Mounted. If the antenna is mounted on a wall, it shall be as flush to the wall as technically possible.

- 3. 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.
- 4. Equipment Structures. Equipment structures mounted on a building roof shall either be hidden from view at 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 (see Section 20.33.080) to minimize visibility from adjacent properties and rights of way.
- 5. Signals, Lights, and Signs. No signals, lights or signs shall be permitted on an attached WCF unless required by the FCC or FAA (see Section 20.33.080(6)(d)). 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.
- 6. Outdoor Storage. Outdoor storage of motor vehicles or materials associated with the WCF is prohibited.

#### 20.33.100 - Design standards for ground mounted equipment structures.

- 1. Maximum Height. Ground mounted equipment structures shall not exceed ten feet in height.
- 2. Location, Design, and Color.
  - a. Ground mounted equipment cabinets/structures that would be visible from adjacent residential properties or public rights of way shall be partially buried, to the extent the seasonal high ground water level permits, of the smallest size possible and of a color, nonreflective material, texture, and architectural design so as to camouflage, conceal, or otherwise make the structure compatible with the setting and any immediately adjacent structure, as determined by the approval authority.
  - b. Equipment cabinets/shelters associated with WCFs/antenna support structures in rights-of-way or camouflaged WCFs/antenna support structures shall be buried or located, to the extent possible, to take advantage of the screening afforded by existing structures and vegetation. Ground mounted equipment cabinets/shelters shall be located outside of rights-of-way unless the approval authority determines that the proposed facilities, including associated screening, will not impede existing and planned road, bicycle, pedestrian, and utility facilities nor obstruct motorists' view of the travel lanes (also see TCC Section 20.07.070, Use Limitations on Corner Lots).

The portion of the equipment structure/fencing that would be visible from adjacent rights of way or parcels occupied or zoned and developable for residential or commercial use shall be screened with evergreen shrubs and/or trees, and/or berms (also see Section 20.33.080(7)). This vegetation shall be of a type, size, and spacing so that within three years of planting (along with any berm or other landscaping feature) it forms a continuous screen as tall as the equipment structure and any associated fencing.

c. Equipment cabinets/structures must meet all building setbacks, screening and other standards of the underlying zoning district, except where they conflict with specific requirements of this chapter.

### 20.33.110 - Abandonment Facilities out of compliance.

- 1. Financial Surety. Prior to the issuance of a building permit authorizing installation of a WCF/antenna support structure, the applicant shall provide a demolition surety in a form and amount deemed by the approval authority to be sufficient to remove and dispose of the WCF/antenna support structure and restore the site to its approximate original condition. The county shall draw upon this surety in the event the responsible party fails to act in accordance with the provisions of this section within one hundred and eighty days of termination of operations, or upon determination by the county that the facility is unsafe, has been abandoned, or is in violation of this chapter. The surety shall remain in effect until the WCF/antenna support structure is removed.
- 2. Notice of Abandonment and Site Restoration. No less than thirty days prior to the date that a WCF/communication provider plans to abandon or discontinue operation of a facility, the provider must notify the county by certified U.S. mail of the proposed date of abandonment or discontinuation of operation. In the event that more than one wireless communication service provider is using the antenna support structure, the structure shall not be considered abandoned until all such users cease use. In the event that a provider fails to give notice, the facility shall be considered abandoned upon the county's discovery of discontinuation of operation.
- 3. Abandonment. Any WCF/antenna support structure that ceases to perform the normal-functions associated with the facility on a continuous basis for a period of six consecutive-months, facilities deemed by the county to be unsafe, or facilities in violation of this chapter shall be deemed abandoned. The compliance officer, who shall have the right to request documentation and/or affidavits from the antenna support structure owner/operator/service-provider(s) regarding the structure's usage, shall make a determination as to the date of abandonment. Upon a determination of abandonment and notice thereof to the owner/operator/service provider(s), the owner(s) and all others listed as responsible parties-provided below, shall remove the WCF/antenna support structure and all associated facilities, and remediate the site within one hundred and eighty days of notice by the county, unless the county determines that the facilities must be removed in a shorter period to protect public safety. At the time of removal, the facility site shall be remediated to its approximate original condition

such that all communication facility improvements that have ceased to be used are removed and the site is revegetated.

In the event that the responsible parties have failed to remove the WCF/antenna support structure and/or restore the facility site within the specified time period, the county may remove the WCF/antenna support structure and restore the site using any surety required by Section 20.33.110(1), and may thereafter initiate judicial proceedings against the responsible parties for any portion of the cost not covered by the surety.

4. Utility Poles. When a utility pole sized to accommodate communication facilities no longer accommodates operating antennas, it shall be replaced with a utility pole of the same size as an adjacent pole or the section of pole that exceeds the height of the tallest adjacent utility pole shall be removed. Such action shall occur within one hundred and eighty days following the date the communication facility discontinued operation.

In the event that the utility lines and cables located on a utility pole accommodating WCF/antennas are required to be placed underground, the WCF/antennas and related equipment shall be removed or relocated as directed in the notice from the county. The county may allow continued use of the pole if the applicant demonstrates conclusively that no other location is available to accommodate a replacement antenna support structure in a less obtrusive manner and the pole will not interfere with utilities and any other proposed improvements.

- 5. Expiration of Approval. County approval for the WCF/antenna support structure shall expire one hundred and eighty days following abandonment or immediately upon removal, whichever occurs earlier; or upon notice that the county deems the facility unsafe or in violation of this chapter, unless remedial action called for by the county is addressed to the county's satisfaction.
- 6. Responsible Parties. The following are considered jointly and severally to be the responsible parties for removal of the antenna support structure, other communication facilities, and site remediation:
  - a. The owner of the abandoned WCF/antenna support structure and, if different, the operator of the abandoned facilities.
  - b. The owner of the land upon which the abandoned WCF/antenna support structure is located.
  - c. The lessee, if any, of the land upon which the WCF/antenna support structure is located.
  - d. The sublessees, if any, of the land upon which the WCF/antenna support structure is located.

- e. Any communications service provider that by ceasing to utilize the WCF/antenna support structure or otherwise failing to operate any of its transmitters or antennas on the WCF/antenna support structure for which it leased space or purchased the right to space on the tower for its transmitters or antennas, and by such ceasing or failure to utilize the WCF/antenna support structure, in fact, caused the tower to become abandoned.
- f. Any person to whom, or entity to which, there has been transferred a license issued by the FCC and under which the WCF/antenna support structure owner/operator operated the facility.
- g. Any person or entity which has purchased all or a substantial portion of the assets of the WCF/antenna support structure owner/operator/service provider(s).
- h. Any entity which has merged with, or which has arisen or resulted from a merger with, the WCF/antenna support structure owner or operator or service provider(s).
  - i. Any person or entity that acquired the owner or the operator of the abandoned WCF/antenna support structure.
- j. Any parent or subsidiary of any of the foregoing that happens to be a corporation.
- k. Any managing partner of any of the foregoing which happens to be a limited partnership.
- 1. Any partner of any of the foregoing that happens to be a general partnership.
- 7. Recording. The landowner's responsibility regarding removal of facilities pursuant to this section shall be recorded against the subject property with the Thurston County auditor's office.

Above is the existing language of Chapter 20.33 TCC, adopted under Ordinance 13058 in 2003. This Chapter will be fully repealed and replaced with the language below.

# **Chapter 20.33 – WIRELESS COMMUNICATION FACILITIES**

<b>Sections:</b>	
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.
- 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 locations

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. 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.

# 20.33.050 Permit approval

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.

- 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.
- C. 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 20.33.100.

- D. 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;
  - 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;
  - 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 County property shall located 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 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 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 20.33.100. 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.
- E. New Towers. In addition to the application materials delineated in subsection A and D 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. 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).
- F. 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.
- G. 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.

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.

# 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;
  - 2. Whether the applicant has shown that its' 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.
- 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.

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

### 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 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).

### 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-feet-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 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.

- <u>iii.</u> 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 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.
  - c. The minimum spacing requirements herein will not apply if they prohibit or have the effect of prohibiting wireless communication.
- 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

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

- 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.

<u>iii.</u> 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.

b. 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 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. 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.

#### 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; andii. 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.
- <u>f. Outdoor Storage</u>. 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 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.
- 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

## 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 Chapter.
  - 2. A site plan that includes:
    - <u>a. Description of the proposed siting's design and dimensions, as it would appear</u> 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 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 owner demonstrates the existence of either of the following:
    - a. That compliance with this Chapter's standards would:
      - i. Prohibit or have the effect of prohibiting the ability of the carrier to provide wireless service; and
      - <u>ii.</u> 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 if there is, in the reasonable discretion of the County:
      - <u>i.</u> 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 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.