

Personal Wireless Communication Facilities Subarea Plan

as amended through Ordinance 5-2002, May 3, 2002

San Juan County Code

Chapter 16.80

PERSONAL WIRELESS COMMUNICATION SERVICE FACILITIES SUBAREA PLAN

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16.80.010 Introduction—Statement of purpose, goal and policy.

This subarea plan is to identify possible locations for the deployment of personal wireless service facilities in San Juan County based on the principles stated in SJCC 16.80.030; to provide standards for their siting, design, radio-frequency performance, and noise performance; and to address monitoring, modification, abandonment, maintenance, co-location, and related issues specific to these commercial service facilities. The overall goal of this subarea plan is to ensure that the location, design and operation of these facilities is responsive to the particular rural and natural character of San Juan County. This subarea plan represents the policy of San Juan County regarding the deployment of personal wireless service facilities to meet this goal and to protect the public health, safety and general welfare, to the extent allowed by the Telecommunications Act of 1996 (TCA).

The TCA constrains local permitting decisions based on concerns regarding the health effects of radio-frequency radiation (RFR) and requires that the Federal Communications Commission (FCC) guidelines for RFR are the sole basis for establishing compliance with health standards. This Plan and any permit issued under its authority may be modified based on amendments to the federal law or changes to the FCC guidelines. (Ord. 8-2001; Ord. 8-1997 § 1)

16.80.020 Applicability and relationship to other county plans and regulations.

The provisions of this subarea plan apply to all land and water areas of San Juan County and apply in addition to any other adopted plans or regulations. This subarea plan supplements regulations applicable to personal wireless facilities found in SJCC 18.40.110, Commercial uses—Standards for site development. Land leases for facility sites are not exempt from the land division and binding site plan procedures and requirements of SJCC 18.70 or RCW 58.17. Easements, however, are not subject to subdivision or binding site plan requirements. Land use permit requirements specified in this subarea plan supersede those otherwise specified in SJCC Title 18. (Ord. 8-2001; Ord. 8-1997 § 2)

16.80.030 Principles of facility location.

- A.** The rapid advancement of technologies for the wireless delivery of voice and data messaging and telephone communications and the 1996 adoption of the TCA have posed both opportunities and problems which are not adequately addressed in the existing Comprehensive Plan or other subarea plans.
- B.** At this time San Juan County has experienced the establishment and proliferation of facilities for commercial telecommunications, radio and television only in a single location outside of the incorporated town of Friday Harbor. This location, on Mount Constitution on Orcas Island, may at some point no longer be sufficient for the forms of wireless services facilities now in use or in demand, and it is necessary for the county to establish specific provisions for them to meet the requirements of the TCA and still maintain the natural beauty and rural character of the islands.
- C.** The potential visibility and visual impacts of personal wireless service facilities is of particular concern in San Juan County. San Juan County is characterized by trees, rolling terrain, and open vistas; outside of established urban growth areas and “activity centers” man-made structures, other than occasional buildings for human use, typically do not interrupt ridgelines or intrude into the natural character of landscape features. Also, they do not typically require lighting at night so as to be visible from considerable distance. nor do they have a similar effect in daylight hours by reflecting sunlight from metal surfaces. Most vistas in rural areas of the county continue to be unaffected by forms of commercial development that are not screened from general view by trees, terrain, or other natural landscape features.
- D.** Since the 1970’s the county has endeavored through the development and adoption of land use and development plans and regulations to maintain its natural features and rural character while population growth and land development occur, and in 1990 San Juan County enacted an ordinance establishing a county land bank and began the preparation of a plan for effective conservation of natural and visual open space resources. To date, San Juan County is still the only county the state to have formed a land bank under state enabling authority passed by the legislature in 1990. The Open Space and Conservation Plan (OSCP) was first adopted by Ordinance No. 124–1991 as a subarea of the Comprehensive Plan, on September 10, 1991, following extensive public involvement as documented in that plan.
- E.** Information generated in the development of the OSCP included maps identifying areas with little or no tree cover, public view corridors, prominent geographic features, and silhouetted ridgelines, all of which were established as important to local residents and property owners for the visual quality of the islands. These areas represent high sensitivity to location of personal wireless service facilities.
- F.** Other areas highly sensitive to such location are those in open-open space tax classification or otherwise managed for natural resource conservation purposes. The latter includes areas designated in the Shoreline Master Program and Comprehensive Plan official maps as “Conservancy” or “Natural” districts, state school trust lands managed for conservation according to the Trust Lands Management Plan, and private lands voluntarily conserved through the County Land Bank, or the private San Juan Preservation Trust, which was created in 1979.
- G.** In some locations, but not in all, the siting and design of wireless service facilities have the potential to render otherwise unsuitable locations as suitable for this purpose and can be considered potentially or conditionally suitable.

- H.** The adequacy of natural visual screening will limit available locations in rural areas; in San Juan County the typical tree cover is Douglas fir, which does not typically grow taller than sixty to eighty feet in the county. Density of tree growth and viewing distance from wireless service facility sites within wooded areas are important for visual screening purposes. However, the effects of clearing on adjacent properties and the potential for blow-down require reliance on additional factors such as setbacks and height limitations to ensure effective screening.
- I.** Existing structures and uses do exist outside of established “activity centers”, urban growth areas and the town of Friday Harbor which, by their having already caused the loss of or reduction in visual quality or natural appearance of a given location, are potentially suitable locations for personal wireless service facilities. Electrical substations and power poles and above-ground fuel and water tanks are examples. However, it is recognized that power poles are not generally acceptable co-location facilities for cellular wireless facilities although they may be acceptable for other forms of wireless facilities.
- J.** Existing structures in activity centers and urban growth areas, other than those areas characterized primarily by residential development, also provide potentially suitable locations for roof- or side-mounted antennae; however, freestanding mounts other than existing flagpoles or power poles are visually incompatible with existing development in these centers.
- K.** Preferred locations are established in the following order of preference:
 - 1. Mount Constitution Sites property, Orcas Island.
 - 2. Portions of urban growth areas, portions of certain rural activity centers where existing commercial or industrial development occurs, and portions of master planned resorts where PWSF is included in an approved master plan as an allowed use, as shown on the official map.
 - 3. Co-location with existing telecommunications antenna mounts, water tanks, fire stations, electrical substations, utility poles, and gravel pits as shown on the official map.
 - 4. Rural areas identified as potentially suitable based on natural screening, parcel size, and other factors identified in the principles stated above.
 - 5. Rural areas identified as conditionally suitable, also based on the principles stated above.
- L.** Any proposal for a location other than the first preference in subsection (K) of this section must include demonstration that the more preferred locations are unworkable for the carrier’s system plan for the county service area for technological reasons. Such demonstration shall also be made before any permit may be granted for a location within 500 feet of an existing residence. (Ord. 8–2001; Ord. 8–1997 § 3)

16.80.040 Official Map—Potentially Suitable Personal Wireless Facility Locations.

A map identifying the preferred locations, potentially suitable locations, conditionally suitable locations, and unsuitable locations, according to the principles stated in SJCC 16.80.030, is incorporated herein by reference, and referred to as the “official map.” (Ord. 8–2001; Ord. 8–1997 § 4)

16.80.050 Definitions.

“**Acoustical engineer**” means, for the purposes of this subarea plan a professional engineer, licensed in Washington, with a degree in mechanical engineering and membership in the Acoustical Society of America; or a professional engineer with demonstrated education, accreditation and experience to perform and certify noise measurements, as determined by the administrator.

“**Antenna**” means the surface from which wireless radio signals are sent from and received by a personal wireless facility.

“At grade” means at ground level. The wireless industry often uses the term “AGL” for “above ground level” or height above grade.

“Average tree height” means the mean height of existing trees within a 150-foot radius of the facility site.

“Co-applicant” means all persons and/or entities joining with an applicant in an application for a development permit, including the owners of the subject property and any tenants proposing to conduct a development or activity subject to a development permit.

“Co-location” means the use of a single mount and/or site by more than one licensed wireless communications carrier. Also, the use by one or more carrier of an existing telecommunications antenna mount, water tank, tire station, electrical substation, utility pole, or gravel pit.

“Commercial mobile radio services” means any of several technologies using radio signals at various frequencies to send and receive voice, data and video.

“Day-Night Sound Level (Ldn)” means a measurement used to characterize average sound levels in residential areas throughout the day and night. The Ldn is an A-weighted equivalent sound level in decibels (dB) for a 24-hour period to which 10 dB are added to nighttime sounds (10 p.m. to 7 a.m.).

“Equipment cabinet” means an enclosed mobile home, shed or box at the base of the mount within which are housed batteries and electrical equipment. This equipment is connected to the antenna by cable. Equipment cabinets are also called “base transceiver stations.”

“Guyed tower” means a monopole or lattice tower that is tied to the ground or other surface by diagonal cables.

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

“Licensed carrier” means a company authorized by the FCC to build and operate a commercial mobile radio services system.

“Location” means the subject property where a use or development is located or proposed to be located.

“Mean sea level (MSL)” means a uniform measure of height above sea level or zero elevation, MSL.

“Mixed use building” means a structure in which non-residential uses are primary, but which also has accessory residential use. However, for home occupations and cottage enterprises the primary use is residential.

“Monopole” means the type of mount that is self-supporting with a single shaft, typically of wood, steel or concrete.

“Mount” means the structure or surface upon which antennas are mounted. There are three types of mounts:

1. Roof-mounted. Mounted on the roof of a building.
2. Side-mounted. Mounted on the side of a building.
3. Ground-mounted. Mounted on the ground.

“Personal wireless facility” means a facility for the provision of personal wireless services, as defined by the Telecommunications Act of 1996. *See* Figure 1. In addition, as used in this plan, facility also refers to the property lease area and all antennas, mounts, equipment cabinets, and any other installations for the operation of a personal wireless facility.

“Personal wireless services” means commercial mobile radio services, unlicensed wireless services, and common carrier wireless exchange access services.

“**Radio-frequency engineer**” means, for the purposes of this subarea plan, a professional engineer licensed in Washington, with a degree in electrical engineering and demonstrated accreditation and experience to perform and certify radio-frequency radiation measurements as determined by the Administrator.

“**Secondary use**” is secondary, or subordinate, to the primary use of the property, *e.g.*, commercial, residential, utilities, etc.

“**Security barrier**” means a locked, impenetrable wall or fence that completely seals an area from unauthorized entry or trespass.

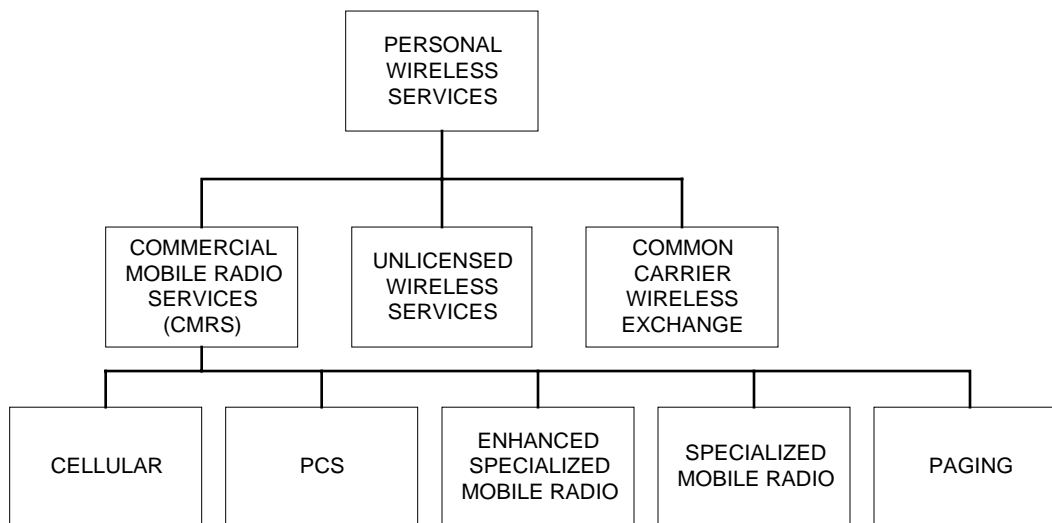
“**Site**” means a portion of a subject property identified in a permit application for the establishment of a personal wireless facility.

“**Siting**” means the method and form of placement of a use or development on a specific area of a subject property.

“**Subject property**” means a tax parcel on file with the San Juan County Assessor, upon which a use or development is either proposed to be, or already is developed, constructed and operated.

“**Unlicensed wireless services**” means commercial mobile services that can operate on public domain frequencies and that therefore need no Federal Communications Commission (FCC) license. (Ord. 8-2001; Ord. 8-1997 § 5)

Figure 1. Personal Wireless Services – Defined by Section 704(a)7(c)(i) of the Telecommunications Act.



16.80.060 General requirements.

- A. The provision of a personal wireless facility on any property shall be considered a secondary use subordinate to the primary use of the property. In those areas mapped as potentially suitable and conditionally suitable, no more than one mount shall be allowed per parcel.
- B. A licensed carrier shall either be an applicant or a co-applicant for land use and development permits required for personal wireless facilities.
- C. The landowner of the subject property must be a co-applicant for all land use and development permits for personal wireless facilities.

- D.** A conditional use permit shall be required for the development, construction and operation of all personal wireless facilities except as specified in subsection (E) of this section. Notice of conditional use application for personal wireless facilities shall be in accordance with requirements in SJCC 18.80.100, except that notice shall be given to all record owners of property within 1,000 feet of the external boundaries of the parcel proposed for facility location. A shoreline conditional use permit shall be required for the development, construction and operation of all personal wireless facilities within the jurisdiction of the Shoreline Management Act.
- E.** A provisional use permit shall be required for the development of personal wireless facilities at the most preferred location (see SJCC 16.80.030(K)(1)).
- F.** A new permit shall be required for all modifications to an approved permit for personal wireless facilities.
- G.** Any proposal for a location other than the first preference in SJCC 16.80.030(K) must include demonstration that the more preferred locations listed in SJCC 16.80.030(K) are unworkable for the carrier's system plan for the county service area for technological reasons.
- H.** A land use permit for a personal wireless facility shall expire 10 years from the date of the issuance. Renewal may be authorized by a new permit if application is made at least three months prior to the expiration date of the original permit. A new permit shall be subject to all applicable regulations in effect at the time of the new application.
- I.** A land use permit for a personal wireless facility shall become null, void and non-renewable if the facility is not constructed and placed into service within one year of the date of the issuance of the permit. A new permit will be required for subsequent use of the site.
- J.** The applicant shall notify San Juan County of all changes in applicant and/or co-applicants of a previously permitted personal wireless facility within 90 days of change.
- K.** All personal wireless facilities must comply with other codes and regulations, including, but not limited to, the County land division regulations (SJCC 18.70), and state and local mechanical, electrical and building codes.
- L.** All personal wireless facilities must comply with the seismic and wind safety standards specified in the Uniform Building Code and Chapter 15.04 SJCC.
- M.** No on-premises storage of material or equipment shall be allowed other than that used in the operation and maintenance of the personal wireless facility site.
- N.** Ground-mounted facilities shall be prohibited in activity centers and urban growth areas.
- O.** All personal wireless facilities must comply with applicable regulations for an adopted Airport Overlay District (SJCC 18.30.180) and for the Eastsound Airport Use district (SJCC 16.55.280). (Ord. 5-2002, Exh. A; Ord. 8-2001; Ord. 8-1997 § 6(1))

16.80.070 Standards.

- A. Siting Standards.** The following are rules by which a proposed personal wireless facility shall be reviewed and found acceptable:
 - 1. All ground-mounted personal wireless facilities shall be surrounded by a security barrier.
 - 2. All ground-mounted personal wireless facilities shall be surrounded by dense tree growth no more than twenty feet from the personal wireless facility in any direction, so that no more than the top ten feet of an antenna is visible from the ground at any point outside the exterior boundaries of the wireless facility site. These trees can be existing on the subject property or installed as part of the proposed personal wireless antenna mount or a combination of both.

Screen trees shall be retained within a 150-foot radius of the facility. A performance bond for the maintenance of required screening shall be recorded with an approved permit in the County auditor's file.

3. Ground-mounted personal wireless facilities shall not project over ten feet above the average tree-top height within a 150-foot radius of the antenna mount. Monopole height shall not exceed sixty feet. Antennas mounted on monopoles or other freestanding mounts shall not exceed twenty feet above the top of the mount for a maximum allowable height of 80 feet.
4. Roof-mounted or side-mounted personal wireless facilities are prohibited on residential buildings and on public primary and secondary schools but may be permitted on other, legal non-residential buildings. Roof-mounted or side-mounted personal wireless facilities may be permitted on mixed-use buildings where all other requirements of this Chapter 16.80 SJCC are met.
5. No residential building (or residence in a mixed-use building) on the subject property shall be closer to the personal wireless facility than a distance equal to the total height of the personal wireless facility measured from ground level.
6. Except in urban growth areas and activity centers, no existing residential building (or residence in a mixed-use building) on adjacent or nearby property shall be closer than 500 feet from the personal wireless facility site boundary.
7. The site boundaries of a personal wireless facility shall be at least 500 feet from the boundaries of the parcel where it is located except: co-location at the existing Mt. Constitution Sites location or in the case of location on or within existing nonresidential or mixed-use structures in activity centers or urban growth areas. No modification to the parcel may be allowed if any parcel boundary subsequently would be closer to the facility than 500 feet.
8. No non-residential or mixed-use building other than the equipment cabinet shall be closer to a ground-mounted personal wireless facility than 50 feet.
9. Roof-mounted personal wireless facilities shall not project more than ten additional feet above the height of a legal, non-residential or mixed-use building, measured at any point along the roof.
10. Side-mounted personal wireless facilities shall not project more than 42 inches from a legal, non-residential or mixed-use building's facade and in no case shall project into an easement, driveway or setback.
11. All applicable requirements of the Uniform Building Code and SJCC Title 15 shall be met.

B. Design Standards. The following are criteria by which a proposed personal wireless facility, including associated equipment cabinets and security barriers, shall be reviewed and found acceptable:

1. **Appearance.** The facility shall blend with and not disturb the visual character of its setting.
2. **Form.** The shape of the facility equipment is unobtrusive in relation to its surroundings.
3. **Color and texture.** The facility shall be in colors and textures that minimize visibility, including against trees and sky.
4. **Size.** The silhouette of the personal wireless facility shall be reduced to the minimum visual impact.
5. **Equipment.**
 - a. The following types of equipment shall not be acceptable:
 - i. Lattice towers, except that they may be specifically allowed at the existing Mount Constitution Sites location on Orcas Island.

- ii. Guyed towers, except that they may be specifically allowed at the existing Mount Constitution Sites location on Orcas Island.
- iii. Roof-mounted antennas projecting more than ten feet above the height of a legal, non-residential or mixed-use building.
- iv. Any equipment that requires lighting for aviation safety purposes.
- b. Ground-mounted personal wireless facilities must have underground vaults for equipment cabinets. Equipment cabinets shall not exceed 12 inches above grade except for exhaust vents.
- c. Equipment cabinets for roof- or side-mounted facilities shall be designed to visually blend with, or made to appear a part of, the structures housing the facilities.
- d. Equipment and site design shall not preclude co-location.
- e. Roof-mounted antennas shall be at least ten feet from property lines.

C. Radio-frequency (RF) Performance Standards. The following are rules by which a proposed personal wireless facility shall be reviewed and found acceptable:

- 1. All equipment proposed for a personal wireless facility shall be FCC-authorized per ET Docket No. 93-62 (hereafter "FCC Guidelines").
- 2. All ground-mounted equipment shall operate in conformance with the FCC Guidelines, as follows:
 - a. Inside the security barrier the equipment shall meet the FCC Guidelines for occupational/controlled conditions.
 - b. Outside and touching the security barrier, the equipment shall meet the FCC guidelines for general population/uncontrolled conditions.
- 3. All side-mounted or roof-mounted equipment shall operate in conformance with the FCC Guidelines as follows:
 - a. At the roof-mount or at the side mount, the equipment shall meet the FCC Guidelines for occupational/controlled conditions.

At grade at any point of any building closest to the antenna, the equipment shall meet the FCC guidelines for general population/uncontrolled conditions.

- 4. Conformance with the FCC Guidelines shall be demonstrated with baseline testing conducted in accordance with the requirements in Figure 2. All subsequent RF radiation monitoring shall also be conducted in accordance with these requirements.
- 5. Unless and until the FCC establishes a method for demonstration of compliance with FCC guidelines for RF exposure, the applicant shall submit results of baseline testing to demonstrate compliance with the FCC guidelines using procedures set forth in Figure 2. Subsection (C)(4) of this section and SJCC 16.80.090(A) shall be null and void if the Congress or the FCC issues a final rule inconsistent with this procedure, and with the intent to preempt or supersede this rule, in which case the applicant shall submit the information demonstrating compliance as specified by the FCC.

Figure 2. Testing and Monitoring Protocol.

EMF Parameter to be Assessed	Test Equipment	Method or Technique	Comments
Microwave Power Density	HP 435B, Battery-Powered MW Power Meter with 8542A Thermistor Sensor and Calibrated Horn Antenna, or updated equivalent	Map 360 degrees around proposed site at 10-meter increments to a distance of 100m. Aim horn away from site or towards existing towers. Make measurements at 1m and 2m above ground in open areas and at occupancy levels in buildings within 100m.	1m simulates the av. Height of small children, 2m that of adults. A hand-held Global Positioning Satellite Receiver (GPS) should be used to position readings. A nonmetal tripod should be used, along with fiber optic cables from sensor to readout.
Broadband Spectrum Analysis Covering the Frequency Range of 100 kHz to 3 GHz	HP 35665A (Low-Frequency), HP8591 (VHF to MW) or HP 8560E (ELF to MW) with ELF and VHF-MW Isotropic Sensors.	Record the spectrum of frequencies at selected GPS coordinates. Note any displayed interference or constructive/ destructive harmonics.	Spectrum analysis readings at: center of site and 4 positions on circles extending 10m, 20m, and 50m from antenna site. Spectrum readings must also be conducted at all GPS locations where RF or MW “hot spots” or “nulls” were previously detected.
Radio Frequency Field Density	Broadband RF Survey Meter with Isotropic omnidirectional probe (Holaday Instruments, Hewlett-Packard, etc.	Probe sensor should be tripod-mounted (nonmetallic) with fiber optic cables at least 10m long connected to readout unit to eliminate possible coupling effects between probe and operator.	RF probe positions should be identical (by Loran coordinates on GPS unit) to MW, and all other sensors or probe positions. Make measurements at 1m and 2m, as above. Flag all “hot spots” or “nulls” in signal density/ intensity.

Notes:

1. Figure 2 is adapted from the “Cobbs Protocol” – *Suggested EMF Monitoring Measurements at Transmitter Sites*, presented by C.A. Cobbs to the FCC on February 18, 1996.
2. Equipment from other manufacturers, or other models, may be substituted if it meets or exceeds the specifications of the indicated equipment, or if the FCC guidelines are modified to specify equipment.
3. If the FCC guidelines for RFR testing and monitoring are revised to specify testing protocols, the FCC- recommended protocols will supersede those in Figure 2.

D. Noise Performance Standards. The following are rules by which a proposed personal wireless facility shall be reviewed and found acceptable:

1. Ground-mounted equipment for personal wireless facilities shall not generate noise in excess of an Ldn of 50 dB at the security barrier.
2. Roof-mounted or side-mounted equipment for personal wireless facilities shall not generate noise in excess of an Ldn of 50 dB at grade at the base of the building closest to the antenna This shall not apply to on-site power generators operating during a power outage as an emergency measure. (Ord. 8–2001; Ord. 8–1997 § 6(2))

16.80.080 Modification requirements.

- A.** From time to time, the applicant or co-applicant may want to alter the terms of an approved permit by physically changing, or altering the operations, of the personal wireless facility. If any portions of the following are modified, such modifications are subject to the granting of a new permit prior to the modification being undertaken. Applications shall include:
1. The vicinity plan, as drawn by, and under the control of, the applicant or co-applicant.
 2. The sight lines, as drawn by, and under the control of the applicant or co-applicant.
 3. The site plan, as drawn by, and under the control of the applicant or co-applicant.
 4. The design, as submitted by the project applicant.
- B.** The conversion of a single-use personal wireless facility to a co-location shall be considered a modification. (Ord. 14-2000 § 7(RRR); Ord. 8-1997 § 6(3))

16.80.090 Monitoring of RF radiation and noise.

- A.** After the personal wireless facility is operational, the applicant shall submit within 90 days of beginning operations, and at annual intervals from the date of issuance of the use permit, existing measurements and maximum future projections for RF radiation from the personal wireless facility, documenting conformance of the testing protocol with requirements in Figure 2 for the following situations:
1. Existing personal wireless facilities maximum RF radiation from the personal wireless facility RF radiation environment. These measurements and projections shall be for the measurement conditions specified in the radio-frequency performance standards section of this chapter, SJCC 16.80.070(C).
 2. Existing personal wireless facilities plus cumulative: estimate of maximum RF radiation from the existing personal wireless facility plus the maximum estimate of RF radiation from the total addition of co-located personal wireless facilities, measured at all frequencies operating in the area. These measurements and estimates shall be for the conditions specified in the radio-frequency performance standards section of this chapter, SJCC 16.80.070(C).
 3. Certification, signed by an independent RF engineer accepted as qualified by the county, stating that RF radiation measurements are accurate and meet FCC Guidelines as specified in the radio-frequency performance standards section of this chapter, SJCC 16.80.070(C).
- B.** After the personal wireless facility is operational, the applicant shall submit, within 90 days of the issuance of the conditional use permit and at annual intervals from the date of issuance of the permit, existing and maximum future projected measurements of noise from the personal wireless facility, for the following situations:
1. Existing personal wireless facilities: maximum noise radiation from the personal wireless facility. These measurements shall be for the type of mounts specified in the noise performance standards section of this chapter, SJCC 16.80.070(D).
 2. Existing personal wireless facilities plus cumulative: maximum estimate of noise from the existing personal wireless facilities plus the maximum estimate of noise from the total addition of co-located personal wireless facilities. These measurements shall be for the type of mounts specified in the noise performance standards section of this chapter, SJCC 16.80.070(D).
 3. Certification signed by an acoustical engineer. stating that noise measurements are accurate and meet the noise performance standards section of this chapter, SJCC 16.80.070(D).

- C. San Juan County may enter the subject property to obtain RF radiation measurements and noise measurements.
- D. If the FCC guidelines, or the federal law, is changed to alter the RF radiation standards or RF testing or monitoring requirements, a permittee shall demonstrate compliance with the current requirements within sixty days of the date the permittee is notified of this requirement by San Juan County. (Ord. 8-1997 § 6(4))

16.80.100 Abandonment or discontinuation of use.

- A. At such time that a carrier plans to abandon or discontinue, or is required to discontinue the operation of a personal wireless facility, such carrier will notify the San Juan County permit center by certified U.S. mail of the proposed date of abandonment or discontinuation of operations. Such notice shall be given no less than 30 days prior to abandonment or discontinuation of operations.
- B. In the event that a licensed carrier fails to give such notice, the personal wireless facility shall be considered abandoned upon such discontinuation of operations.
- C. Upon abandonment or discontinuation of use, the carrier shall physically remove the personal wireless facility within 90 days from the date of abandonment or discontinuation of use. "Physically remove" shall include, but not be limited to:
 - 1. Removal of antennae, mounts, equipment cabinets and security barriers from the subject property.
 - 2. Transportation of the antennas, mount, equipment cabinets and security barriers to an off-island (outside of San Juan County) repository.
 - 3. Restoring the location of the personal wireless facility to its natural condition, except any remaining landscaping and grading.
- D. If a carrier fails to remove a personal wireless facility in accordance with this section, San Juan County shall have the authority to enter the subject property and physically remove the facility. Costs for the removal of the personal wireless facility shall be charged to the landowner of record in the event San Juan County must remove the facility. (Ord. 8-1997 § 6(5))

16.80.110 Maintenance requirements.

- A. The applicant and co-applicant shall maintain the personal wireless facility. Such maintenance shall include, but shall not be limited to, painting, structural integrity and landscaping.
- B. Maintenance may include topping of trees within a 150-foot radius of the facility if necessary to continue operation (but only to a point no lower than ten feet below the top of the antenna(s). Topping in excess of that allowed shall be grounds for permit revocation.
- C. In the event the applicant or co-applicant fails to maintain the facility in accordance with permit conditions to address visual impacts or public safety, San Juan County may undertake the maintenance at the expense of the applicant or co-applicant landowner. (Ord. 8-1997 § 6(6))

16.80.120 Co-location requirements.

- A. Licensed carriers shall share personal wireless facilities and sites where personal wireless facilities are located with other licensed carriers where feasible, thereby reducing the number of personal wireless facilities that are stand-alone facilities.
- B. All freestanding mounts shall be designed so as not to preclude co-location.
- C. Tip-to-tip co-location is considered to be standard design on a single mount.

- D.** All applicants for a conditional use permit for a personal wireless facility shall demonstrate a good faith effort to co-locate with other carriers. Such good faith effort includes demonstration by the applicant of:
1. Contact with all the other licensed carriers for commercial mobile radio services operating in San Juan County.
 2. Sharing information necessary to determine if co-location is feasible under the design configuration most accommodating to co-location.
 3. In the event co-location is found to be not feasible, a written statement of the reasons for the unfeasibility shall be prepared.
 4. In the event co-location is found to be feasible, the applicant shall include provisions for co-location of personal wireless facilities.
- E.** In the event co-location is represented to be not feasible, the County may retain a technical expert in the field of RF engineering to verify if co-location at the site is not feasible or is feasible given the design configuration most accommodating to co-location. The cost for such a technical expert will be at the expense of the applicant.
- F.** San Juan County may deny a land use permit to an applicant for a personal wireless facility who has not demonstrated a good faith effort to co-locate on an existing facility.
- G.** Co-location on monopoles permitted prior to September 3, 1997, the effective date of Ordinance 8–1997, may be allowed only if all requirements of this chapter are met. (Ord. 8–2001; Ord. 8–1997 § 6(7))

16.80.130 Environmental documentation.

- A.** Personal wireless facilities not expressly exempt from the Washington State Environmental Policy Act (SEPA) are subject to environmental review for which San Juan County is the lead agency.
- B.** The National Environmental Policy Act (NEPA) applies to all applications for personal wireless facilities. NEPA is administered by the FCC *via* procedures adopted as 47 CFR Ch. I, Part 1, Subpart I, Section 1.1301 *et seq.* The FCC requires that an environmental assessment (EA) be filed with the FCC prior to beginning operations for any personal wireless facility to be located within any of the following: wilderness areas, wildlife preserves, endangered species, historical sites, Indian religious sites, flood plains, wetlands, high intensity white lights in residential neighborhoods, and excessive radio-frequency radiation exposure.
- C.** At the time of application to the County, if any of the conditions listed in subsection (B) of this section are affected, an EA that meets FCC requirements shall be submitted to San Juan County. An EA shall be submitted to the County for each personal wireless facility site that requires such an EA to be submitted to the FCC. (Ord. 8–1997 § 6(8))

16.80.140 Submittal requirements.

The following shall be included with an application for a land use permit for all personal wireless facilities.

A. General Submittals.

1. Name, address and telephone number of the applicant and all co-applicants as well as any agents for the applicant or co-applicants.
2. Co-applicants include the record landowner of the subject property; or site lease, easement or property license holders; and licensed carriers and tenants for the personal wireless facility.

3. A licensed carrier shall either be an applicant or a co-applicant.
4. Written statement that the lease or other property conveyance between the applicant and co-applicant landowner of the subject property contains the following provisions:
 - a. Landowner can enter into leases or other property conveyances with other carriers for co-location.
 - b. Landowner is responsible for the removal of the personal wireless facility in the event the licensed carrier fails to remove it upon abandonment.
5. Written, irrevocable commitment valid for the duration of the existence of the facility, to rent or lease available space for co-location on the facility, without discrimination to other personal wireless facility providers.
6. Original signatures for the applicant and all co-applicants applying for the land use permit. If the applicant or co-applicant will be represented by an agent, original signature authorizing the agent to represent the applicant and/or co-applicant. Photo-reproductions of signatures will not be accepted.
7. Demonstration that the applicant has legal access over all private ways proposed for use.
8. Copies of manufacturer engineering specifications for the antenna(s) and transmitter(s) proposed to be located on the site. This shall not include information used by or on behalf of the carrier to modify engineering specifications other than that used in any re-engineering performed to demonstrate compliance with the FCC guidelines for RFR emissions.

B. Location Submittals.

1. Identify the subject property by including the name of the island name of the nearest road or roads, and street address, if any.
2. Tax parcel number of subject property.
3. Comprehensive Plan land use designation for the subject parcel and for all parcels within 1,000 feet of the property lines of the subject parcel.
4. A line map to scale showing the subject property and all properties within 1,000 feet and the location of all buildings, including accessory structures, on all properties.
5. An island-wide map showing all other existing personal wireless facilities on that island.
6. The specific locations for this applicant of all future personal wireless facilities in San Juan County on a county-wide map.

C. Siting Submittals.

1. A vicinity map at one inch equals 40 feet showing the following:
 - a. Property lines for the subject property.
 - b. Property lines of all properties adjacent to the subject property.
 - c. Tree cover on the subject property and all properties adjacent to the subject property, by specie and average height from the State of Washington Department of Natural Resources.
 - d. Outline of all existing buildings, including notation of their purpose (e.g., residential buildings, garages, accessory structures, etc.), on the subject property and all properties adjacent to the subject property.
 - e. Proposed location of antenna mount and equipment cabinet(s).

- f. Location of all roads, public and private, on the subject property and on all properties adjacent to the subject property including driveways proposed to serve the personal wireless facility. (Specify public or private ownership.)
 - g. Distances, at grade, from the proposed personal wireless facility to each building on the vicinity plan.
 - h. Contours of the site at each two feet above MSL.
 - i. Lines representing the sight line showing viewpoint (point from which view is taken) and visible point (point being viewed) from subsection (C)(2) of this section.
2. Sight line representations and photographs as described below:
 - a. Sight line representation. A sight line representation shall be drawn from the closest facade of each residential building (viewpoint) included on the Vicinity Plan to the highest point (visible point) of the personal wireless facility. Where residences in a mixed-use building will be in the line-of-sight of the personal wireless facility, a sight line representation shall also be drawn from the facade of the affected residences as described above. Each sight line shall be depicted in profile, drawn at one inch equals 40 feet. The profiles shall show all intervening trees and buildings.
 - b. Existing (before condition) photographs. Each sight line shall be illustrated by one four-inch by six-inch color photograph of what can currently be seen from the residential or mixed use building.
 - c. Proposed (after) condition photographs. Each of the existing condition photographs shall have the proposed personal wireless facility superimposed on it to show what will be seen from residential or mixed use buildings if the proposed personal wireless facility is built.
 3. A site plan dimensioned at one inch equals 20 feet, showing the following:
 - a. The entire subject property, including property lines and roads (public and private) adjacent to the subject property.
 - b. A dimensioned drawing of the proposed site in relation to the subject property boundaries, accompanied by a metes and bounds description of the site area
 - c. All existing buildings, including accessory structures.
 - d. All existing vegetation by mass or individually by diameter (four feet from the ground) of each stand-alone tree or shrub. Tree masses or individual stand-alone trees shall be identified by specie(s).
 - e. Proposed security barrier, indicating type and extent as well as point of controlled entry.
 - f. All proposed changes to the existing property, including grading, vegetation removal and temporary or permanent roads and driveways.
 4. Siting elevations, or views at-grade from the north, south, east and west for a 50-foot radius around the proposed personal wireless facility plus from all existing public and private roads that serve the subject property. Elevations shall be at either one-quarter inch equals one foot or one-eighth inch equals one foot scale and show the following:
 - a. Antennas, mounts and equipment cabinet(s).
 - b. Security barrier. If the security barrier will block views of the personal wireless facility, the barrier drawing shall be cut away to show the view behind the barrier.

- c. Existing trees and shrubs at current height and proposed trees and shrubs at proposed height at time of installation.
- d. Grade changes, or cuts and fills, to be shown as original grade and new grade line.

In addition, the applicant shall mark the proposed site in a manner to approximate the total height and breadth of the facility so as to be visible to the public.

D. Design Submittals.

1. Equipment brochures for personal wireless facilities such as manufacturer's specifications or trade journal reprints.
2. Materials of the personal wireless facility and security barrier, if any, specified by generic type and specific treatment (*e.g.*, anodized aluminum, stained wood, painted fiberglass, *etc.*)
3. Colors represented by a color board showing actual colors proposed.
4. Dimensions of all equipment specified for all three directions: height, width and breadth.
5. Appearance shown by at least two photographic superimposition of the personal wireless facility within the subject property. The photographic superimposition shall include the antennas, mounts, equipment cabinets and security barrier, if any, for the total height, width and breadth.
6. Landscape plan including trees and shrubs proposed to be added, identified by size of specimen at installation and species.
7. Maintenance specifications, and projected maintenance schedule and cost and a proposed maintenance bond.

E. Co-Location Submittals. The applicant shall submit a statement of good faith effort to achieve co-location with other carriers, including:

1. Contact with all the other licensed carriers for commercial mobile radio services operating in San Juan county.
2. Sharing information necessary to determine if co-location is feasible under an optimal design configuration.

In the event co-location is found to be not feasible, a written statement of the reasons for the unfeasibility shall be prepared.

F. Radio-frequency (RF) Radiation Performance Submittals. Applicant shall provide a statement listing the existing and maximum future projected measurements of RF radiation from the proposed personal wireless facility for the following situations:

1. Existing, or ambient: the measurements of existing RF radiation.
2. Existing plus proposed personal wireless facilities: maximum estimate of RF radiation from the proposed personal wireless facility plus the existing RF radiation according to the radio-frequency performance standards of SJCC 16.80.070(C).
3. Existing plus proposed personal wireless facilities plus cumulative: maximum estimate of RF radiation from the proposed personal wireless facility plus the maximum estimate of RF radiation from the total addition of co-located personal wireless facilities plus the existing RF radiation environment. These measurements shall be for the conditions specified in the radio-frequency performance standards of SJCC 16.80.070(C).

4. Certification, signed by an independent RF engineer, stating that RF radiation measurements are accurate and meet FCC Guidelines as specified in the radio-frequency performance standards of SJCC 16.80.070(C).

G. Noise Performance Submittals. The applicant shall provide a statement listing the existing and maximum future projected Ldn measurements of noise from the proposed personal wireless facilities, for the following:

1. Existing, or ambient: the measurements of existing noise.
2. Existing plus proposed personal wireless facilities: maximum estimate of noise from the proposed personal wireless facility plus the existing noise environment.
3. Existing plus proposed personal wireless facilities plus cumulative: maximum estimate of noise from the proposed personal wireless facility plus the maximum estimate of noise from the total addition of co-located personal wireless facilities plus the existing noise environment.
4. Certification, signed by an acoustical engineer, stating that noise measurements are accurate and meet the noise performance standards of SJCC 16.80.070(D).

H. Environmental Submittals.

1. The applicant shall submit an environmental assessment (EA), if required by federal law.
2. The applicant shall list location, type and amount of any materials proposed for use within the personal wireless facility that are considered hazardous by the federal, state or local government, and include materials safety data sheets to be provided to the fire marshal and to the fire chief of the applicable district.
3. In the event that an applicant has not included an Environmental Assessment (EA) prepared under NEPA rules and the Administrator has information to indicate that an EA is necessary under NEPA, the county shall not consider an application complete before receiving a determination from the lead agency that an EA is in fact not required.

I. Post-Construction Submittals.

1. The applicant shall submit to the permit center a dimensioned drawing of all components of the facility as constructed within 30 days of installation.
2. The applicant shall annually submit an affidavit to the permit center regarding maintenance conducted in accordance with SJCC 16.80.110(C) of this ordinance and any permit conditions, beginning one year from the effective date of the land use permit. (Ord. 8-2001; Ord. 8-1997 § 6(9))