



Guidelines for the Development of Wireless Communication Facilities (Adopted ???)

The following guidelines apply to all wireless communication facilities subject to obtaining a Use Permit expect for government owned communications facilities used exclusively to protect public health, safety and welfare.

BACKGROUND AND INTENT: The purpose and intent of these guidelines is to provide a uniform and comprehensive set of guidelines for the development, operation, and maintenance of wireless communications facilities consistent with applicable federal regulations. The guidelines are designed to protect and promote public health, safety, community welfare, zoning integrity and the aesthetic quality of the county, and to minimize the adverse impacts of wireless communications facilities, in conformity with goals and policies of the General Plan, while providing for the communications needs of residents, business, visitors and government within Mendocino County. It is the intent that these guidelines be followed to the greatest extent possible, recognizing that exceptions may be warranted by circumstances unique to specific applications.

The increasing number of wireless communications facilities has significant potential for beneficial and detrimental impacts within Mendocino County. Wireless communications facilities are a vital link in the local emergency response network and in the general communications needs of residents, businesses, visitors and government within Mendocino County. Structures associated with wireless communications facilities, including antennas, antenna towers, lighting, equipment shelters, generators, fences and access roads can interfere with views, natural vegetation, quiet seclusion, scenic values and rural quality of life. The cumulative effect of numerous facilities being developed by competing communication services providers can create unnecessary visual impacts through the development of separate redundant facilities. As such, wireless communications facilities shall be sited and designed to minimize adverse impacts on communities, neighborhoods, vistas, and natural resources to protect public health, safety and welfare.

The County recognizes that guidelines for wireless communications facilities permit applications are needed to ensure consistent evaluation and uniform application of standards which are in compliance with the Telecommunications Act of 1996, which states that the County "...shall not unreasonably discriminate among providers of functionally equivalent services..." Further the Act states "nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless facilities."

Further, the Act limits local authority in considering potential health impacts that may result from such installations, Mendocino County will construe this "limitation" as a warranty, made by the Federal government and backed by its full faith and credit, to the citizens of Mendocino County, that they have undertaken abundant, rigorous and independent investigation and testing, and can make this assurance of the health and safety of this technology now and in the years to come. Further, we construe that by reserving authority in health and safety matters to itself, the Federal government also assures all legal and financial responsibility arising from potential health and safety impacts, now and in the years to come. Finally, since local authorities are limited from local oversight of health concerns, we construe that the citizens of Mendocino County, its businesses, jurisdictions and governments shall be held entirely whole and harmless of any liabilities arising from health and safety concerns now and in the years to come.

A. PRE-APPLICATION CONFERENCE: The "pre-application" conference is a chance for the applicant to present preliminary development plans to representatives from the County Department of Planning and Building Services ("Department") and provides an opportunity for the exchange of ideas and information to help identify potential development issues and facilitate a quality project.



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1. Prior to submitting an application for a use permit for a new wireless communications facility, the applicant is strongly encouraged to schedule and attend a pre-application conference with Planning and Building Services ("Department"). ~~the Department.~~

B. APPLICATION SUBMITTAL REQUIREMENTS: An application for a use permit for a wireless communications facility shall include the following materials and information.

19. The Director may waive submittal requirements or require additional information based on factors specific to an individual project.

20. The Director may, at the applicant's expense, require independent peer review of any technical claims or data submitted as part of the review process.

43. Each wireless communication provider shall provide a **network** plan of its network to the **County Department** prior to any application for the installation of a wireless communication facility. The plan shall cover the entire County, including incorporated areas, extending one (1) mile beyond the County border. The **network** plan shall include the following:

- a. All of the provider's existing wireless communication facilities, by size, type, and their coverage areas. Any gaps in coverage shall be illustrated. This shall include a map, and a table (in hardcopy and digital formats) listing facility situs addresses, site names/identification, facility types, and precise latitude/longitude coordinates in decimal degree format, for inclusion on the County's wireless communication facility map (baseline catalogue).
- b. All presently anticipated future service areas, anticipated deployment date, and types of wireless communication facilities and heights desired for each of the service areas.
- c. The various types of wireless communication facilities used by the provider to furnish service and when they are used. This includes drawings providing the sizes and shapes of the antennae and equipment as well as written material describing their application.
- d. If the applicant has previously submitted this information, the applicant may certify in writing that none of the submitted information has changed.

24. To the extent permitted by law, information contained in each provider's communication network plan shall be treated as confidential by the County if requested in writing.

35. To the extent permitted by law, non-confidential information may be shared with other interested parties seeking to locate wireless communication facilities in Mendocino County, in an effort to promote co-location and co-development of facilities.

46. A statement of the communication objectives sought for the proposed location, whether the proposed facility is necessary to prevent or fill a significant gap or capacity shortfall in the applicant's service area, whether it is the least intrusive means of doing so, and whether there are any alternative sites that would have fewer aesthetic impacts while providing comparable service.

57. A **location** map showing the location of the proposed facility in relation to commonly identifiable landmarks such as towns and highways.

68. A **parcel** map showing the boundaries of the parcel on which the proposed communications facility is to be located, including all contiguous lands held by the same owner, and the location of the proposed facility and existing improvements on the parcel. "Parcel" means a separate



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parcel of land created in compliance with state laws and county ordinances, not just an area of land being leased by a communications provider.

79. A site plan drawn to scale showing all components of the proposed facility, including towers, buildings, generators, fuel tanks, fencing, parking areas, access roads, utility lines, grading, tree removal and proposed new vegetation. The map shall also include topographic information of the project site and surrounding area within 300 feet.

810. Elevation drawings of the site and facility drawn to scale showing ground elevations and relative heights of structures and trees within 200 feet of the proposed facility, and specifying materials and colors of proposed structures.

911. A description of the facility that includes:

- a. The types of services to be provided by the applicant to its customers.
- b. The numbers, types and dimensions of antennas and other equipment to be installed.
- c. The power rating for all antennas and equipment.
- d. A statement that the system by itself, and in conjunction with other facilities in the vicinity, will conform to radio frequency radiation emission standards adopted by the FCC.
- e. Capacity of the site and facility to accommodate expansion through co-location including documentation establishing the structural integrity for the antenna tower's proposed uses and possible co-location. Prior to issuance of a building permit, an engineer shall certify compliance with these shared use design standards.

4012. A map showing the locations of the proposed antennas and the approximate area served by each antenna.

4413. A map showing the locations of all other wireless communications facilities subject to a use permit within five miles of the proposed facility.

4214. Evidence of ownership or authorization for use of the proposed site. Applicant shall not enter into a lease that precludes possible co-location.

4315. Evidence of easements or other authorization for proposed utility lines and for vehicular access between the site and a public road. Should the access be via a private road, which also serves as access to other properties, a road condition assessment for the wireless communication facility shall be required. Prior to development of the site the applicant shall provide to the Department, an assessment prepared by a registered civil engineer of the condition of the existing private road, serving the site to provide baseline data on the condition of the road. The assessment shall include photos and video as well as a written narrative to document the road's current statuscondition. Promptly after the installation of the communication facility, any damage to the road associated with construction activity shall be repaired to a condition that is equal to or better than the existing road condition prior to development of the site.

Promptly after any road improvements are completed, the applicant shall provide to the Department, a post assessment prepared by a registered civil engineer of the condition of the existing private road, serving the site to provide data on the condition of the road to show that it has been repaired to an equal "as-is" or better condition. The post assessment shall include photos and video as well as a written narrative to document the road's condition.



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- Notice of project shall be provided by the Department to all property owners that use the shared private road.
~~Notice of project shall be provided to all property owners that use the shared private road.~~
- 4416.** Visual analysis of the proposed facility at design capacity, including at a minimum photo montages, photo simulations or other accurate representations of visual appearance from at least three different locations, at least two of which shall be from public locations from where the facility will be most clearly visible. For locations determined by the Department to be especially visually sensitive, the applicant may be requested to provide a demonstration of the proposed height of the facility on the site in the form of a tethered balloon, a vehicle-mounted boom, or other object raised to the proposed height.
- 4517.** If the facility includes an antenna tower, provide a detailed description of the tower and its capacity to support additional antennas. The description shall provide information on how many carriers could be accommodated on the facility with adequate signal coverage.
- 4618.** A narrative discussing the factors leading to selection of the proposed site and antenna height, including alternative sites considered. For facilities not proposed to be accommodated on an existing facility, building or structure, the applicant shall provide a detailed statement, supported by a technical analysis, demonstrating why co-location is not practical. The analysis shall describe at least two alternatives that could provide comparable service to the proposed service area or explain why there are no alternatives to the site. The alternatives shall include at least two different locations if there is no wireless facility on the subject property, and at least one alternative design if there is an existing facility on the site. The analysis need not include alternatives that would not produce a minimum quality signal or would create substantial interference with another service. Alternatives should include a mix of service strategies that incorporate existing, attached, or freestanding facilities. The analysis shall also compare gaps in coverage that may be created by the alternative sites. The analysis shall include a map showing alternative sites and provide the following information for each alternative:
- a. A description of each alternative shall include the following:
- ab. Level of service;
 - bc. Number of towers;
 - cd. Difference in tower heights and silhouettes from the proposed project;
 - de. Differences in facility design, including numbers and types of antenna arrays, ancillary equipment and structures, and site access requirements and constraints;
 - ef. Potential visual impacts;
 - fg. Existing land uses within 500 feet;
 - gh. Proximity to service area;
- 4719.** For facilities not proposed to be co-located, applicant shall provide sufficient evidence for the Department to conclude that the system design and engineering requirements of the proposed antennas and equipment can not cannot be accommodated on any existing tower or alternative site (building or structure) due to one or more of the following justifications:
- a. No existing tower or alternative site would be of sufficient height to meet the proposed coverage requirements, and the placement of multiple antennas at lower heights could not achieve a similar level of service.



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- b. No existing tower or alternative site is of sufficient structural strength to support the proposed antennas and equipment, and reinforcing or replacing an existing facility is not reasonably feasible.
- c. Alternative locations would cause undue radio frequency or other signal interference problems.
- d. The owner of the alternative tower or site has been contacted but is unwilling to make space available for the proposed antennas and equipment, or such owner has offered available space but the terms of availability are not reasonable due to either of the following reasons, as confirmed by the Director:
 - i. The available space is not offered at a reasonable market lease rate, as substantiated by analysis of current market data, or
 - ii. The financial terms to build and operate the proposed facility are not commercially-reasonable.

~~1820.~~ A statement that the applicant and successors agree to negotiate in good faith for co-location of the proposed facility by third parties, and to require no more than a reasonable charge for co-location. The facility shall provide if requested, space for any public emergency service provider to locate communication equipment on the tower, provided no interference to function will result at a minimum or no fee. Providers/applicants that reserve space for, or co-locate with emergency service or other public service agencies shall be given preference.

~~19. The Director may waive submittal requirements or require additional information based on factors specific to an individual project.~~

~~20. The Director may, at the applicant's expense, require independent peer review of any technical claims or data submitted as part of the review process.~~

C. STANDARDS: Standards are provided to help achieve a project that is consistent with the purpose and intent of the guidelines. It is the intent of the Planning Commission that these guidelines be followed to the greatest extent possible, recognizing that exceptions may be warranted by circumstances unique to specific applications.

1. General:

- a. Communications facilities that can co-locate, in a stealth manner, with an existing facility will have highest preference, followed by facilities located on existing structures or buildings, then followed by facilities that can be designed or located so as to be visually unobtrusive ("stealthed"). Highly visible sites and sites within or near residential areas or schools are least preferred and will only be considered when there is compelling evidence that no other feasible alternative exists. Industrial or Commercial properties are generally preferred locations for wireless communication facilities.
- b. The design of communications facilities should promote co-location among different communication services providers. To the extent feasible, lease areas, antenna towers, and equipment structures shall be designed to provide for the consolidation of future facilities to eliminate or minimize the visual clutter resulting from multiple communications structures. Applicant shall not enter into a lease that precludes possible co-location.
- c. Existing facilities should make available unutilized space for co-location of other antennas and equipment, including space for competing communication services providers.



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- d. If use of any portion of a communications facility is discontinued for more than one year, such portion of the facility no longer in use, above grade, shall be completely removed from the site and disused portions of the site shall be restored to a natural-appearing condition.
- e. Prior to issuance of any permits for new communications facilities, the applicant shall provide an irrevocable letter of credit, bond, certificate of deposit, or other reasonable form of security satisfactory to County Counsel, sufficient to fund the removal of the facility and restoration of the site in the event that the carrier abandons operations or fails to comply with requirements for removal of facilities.
- f. No signs, other than those required or necessary for operation of a communications facility shall be displayed on a communications facility site.
- g. An identification sign for each company responsible for operation and maintenance of facilities at the site, not larger than two square feet, shall be posted at a location from which it can be easily read from outside the perimeter of the communications facility, and shall provide the name, address, and emergency telephone number of the responsible company.
- h. Use permits for communications facilities shall be issued for a maximum term of ten years.
- i. All wireless communications facilities shall comply with the applicable provisions of the California Building Code, California Electrical Code, California Plumbing Code, California Mechanical Code, California Fire Code, and rules and regulations imposed by state and federal agencies.
- j. Towers shall not be built with guy wires in the absence of compelling evidence that there is no feasible construction alternative.
- k. Roads constructed or improved to provide access to a communications facility shall be provided with drainage facilities sufficient to convey storm runoff to natural drainage channels to prevent erosion.
- l. Generators shall be equipped with mufflers and spark arresters, and shall not produce noise levels exceeding 50 dba at the nearest off site residence. Routine testing and maintenance shall be limited to weekdays between 8:30 a.m. and 4:30 p.m. Repairs and emergency use are not included in this limitation.

~~m. Expanded public notice may be provided for applications for new antenna towers when deemed necessary by the Director. In such cases, in addition to the standard notice provided to surrounding property owners, an eighth page legal ad may be published in a local newspaper of general circulation in lieu of a standard legal notice.~~

ma. Antenna towers shall be subject to setbacks required by the County Zoning Code, and shall be set back a minimum of 110% of the overall height from any property line, and a minimum of 500% of the overall height from any residence or school. Tower setbacks in excess of setbacks required by the Zoning Code may be reduced under any one of the following circumstances:

- i. The facility is proposed to be co-located with an existing, legally established communications facility.
- ii. All of the owners of affected properties agree to the reduced setback. A property is considered affected if its dwelling unit lies within a distance equivalent to the required setback for the subject tower prior to reduction and the reduced setback would result in



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the tower being located closer to the dwelling unit than the above setback would otherwise allow.

iii. Overall, the reduced setback enables greater mitigation of adverse visual and other environmental impacts than would otherwise be possible.

iv. Within sixty (60) days of completion of the installation of any antenna tower, the applicant shall submit a written certification from a licensed engineer to the County of the actual height.

2. Visual Appearance:

- a. Communications facilities shall be located and designed to minimize visibility and to be visually compatible with their surroundings.
- b. Communications facilities should result in a minimal visual impact for those residents in the immediate area and for those in the larger community who view these facilities from a distance. There shall be considered in assessing visual impacts a balance between the interests of the goal of providing co-location on new facilities and the increased visual effect such facilities may cause to the surrounding area.
- c. All exterior surfaces of structures and equipment associated with a communications facility shall have subdued colors and non-reflective materials selected to blend with their surroundings.
- d. Co-location is required when feasible and when it minimizes adverse effects related to land use compatibility, visual resources, public safety and other environmental factors. Co-location is not required when it creates or increases such effects and/or technical evidence demonstrates to the satisfaction of the Director that it is not feasible due to physical, spatial, or technological limitations. Fiscal constraints or competitive conflicts are not considered justifiable reasons for not co-locating a new facility where the opportunity for co-location exists.
- e. Flush mounted antennas are preferred in visually sensitive settings.
- f. New wireless communication facilities shall be discouraged on or near ridge top sites where they will be silhouetted against the sky from the surrounding community, or from highly used public locations such as a public trail, public park or other public outdoor recreational area or historic area, unless supported by a finding that it blends with the surrounding existing environment in such a manner as to be effectively unnoticeable.
- g. Facility towers, antennas, buildings and other structures and equipment visible from adjacent residences or public vantage points, shall be designed, located, constructed, painted, screened, fenced, landscaped or otherwise architecturally treated to minimize their appearance from off-site locations and to visually blend with the surrounding natural and built environments.
- h. Outdoor lighting shall be kept to a minimum. Towers requiring FAA lighting are discouraged. Tower lighting, if approved, shall be the minimum required by FAA regulations. Towers requiring strobe lighting shall be prohibited. Other outdoor lighting shall be designed or located so that only reflected, non-glaring light is visible from beyond the immediate vicinity of the site, and shall be turned off except when in use by facility personnel.



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- i. Satellite dishes and other parabolic antennas shall be located in the least visible functional location on the site. In general, preferred locations will be close to the ground, on a wall below the roofline, or back from the edge of a roof.
- j. Towers located in open areas are encouraged to utilize existing vegetation to screen the facility's presence. Clearing should be limited to the minimum area required to accommodate facilities. If no open area is available, justification for the specific site must be provided. Further, providers are encouraged to develop the facility within a structure that would camouflage its presence, e.g., a water tower, windmill, or other structure that would blend with the setting of the area.
- k. Tower farms or the grouping of two (2) or more towers close together is strongly discouraged; however the grouping of towers is acceptable if the visual impact is lower than other alternatives. If towers must be close together, appropriate camouflage and concealment techniques must be used.

3. Radio Frequency Emissions:

- a. Every wireless communications facility, by itself and in combination with other nearby communications facilities, shall comply with the Federal Communications Commission's limits for human exposure to radio frequency electromagnetic fields.

4. Landscaping:

- a. Existing trees and other vegetation, which will provide screening for the proposed facility and associated access roads, shall be protected from damage during and after construction.
- b. Areas of bare soil resulting from construction shall be replanted with vegetation compatible with that existing prior to construction, sufficient to stabilize soil and prevent erosion.
- c. Additional landscaping shall be installed and maintained where it would provide a useful reduction in the visual impact of a communications facility. Introduced vegetation shall be native, drought tolerant species compatible with the predominant natural setting of the project area. Non-native drought tolerant species compatible with surrounding vegetation may be used in urban settings.
- d. Vegetative landscaping, which uses a mix of native trees and shrubs of various heights and sizes and is placed in a "random" pattern to appear more natural is strongly preferred when landscape screening is warranted.
- e. Communications facility sites, whether leased or purchased, shall be of sufficient size to include vegetative screening if landscaping would provide a useful reduction in visual impact.
- f. No trees that provide visual screening of the communications facility shall be removed after project completion except to comply with fire safety regulations or to eliminate safety hazards. Tree trimming shall be limited to the minimum necessary for operation of the facility.
- g. The applicant shall enter into a landscape maintenance agreement with the County to ensure the installation and maintenance of required landscaping. Failure to maintain landscaping shall be grounds for revocation of the use permit. A surety bond shall be required, where deemed appropriate, to insure maintenance of landscaping (existing, native vegetation or new required landscaping).



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5. Public Health and Safety:

- a. Government-owned communication facilities used exclusively to protect public health, safety and welfare shall be exempt from obtaining a use permit but are subject to these guidelines.
- b. Communications facilities shall incorporate reasonable security measures to prevent unauthorized access or vandalism.
- cb. Communications facilities shall comply with California Department of Forestry Fire Safe Regulations, or with local fire agency requirements.
- de. Equipment buildings and enclosures shall be equipped with automatic fire extinguishing systems acceptable to the responsible fire agency.
- e. All antennas and antenna towers shall comply with wind loading and other structural standards contained in applicable building and technical codes, industry codes, and manufacturer standards so as not to endanger the health and safety of residents, employees or travelers in the event of structural failure due to extreme weather conditions, seismic events or other acts of nature.
- fe. The Wireless Communications Facility must comply in all respects with the current standards of the American National Standards Institute (ANSI)
- gf. Antennas and antenna towers shall be inspected every ten years, and following significant storm or seismic events, by a structural engineer licensed in the state of California to assess their structural integrity, and a report of the engineer's findings shall be submitted to the Department. Costs of the inspection and report shall be borne by the applicant.
- hg. Communications facilities intended to provide services for the benefit of the general public during an emergency shall be designed to survive possible storm or seismic events without interruption of service.
- ih. Prior to commencement of operations, all surplus construction materials and debris, including cleared vegetation, shall be removed from the site to a proper disposal facility. Thereafter the site shall be kept free of refuse.
- ~~i. Wireless communication facilities owned and operated by a public agency shall be exempt from these guidelines.~~

D. DEFINITIONS: The terms used in these guidelines shall have the meanings here listed. Definitions for the listed terms from other sources shall not take precedence over the definitions here listed for the interpretation of these guidelines.

1. Antenna. A device used in communications designed to radiate and/or capture electromagnetic signals.
2. Antenna tower. Any pole, tower, or other structure, over 10 feet tall, erected for the purpose of supporting one or more antennas.
3. Building-mounted. Attached to and supported by a building or other structure more than 10 feet tall, other than an antenna tower.



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4. Co-location. The installation of antennas operated by different entities in close proximity so that use of substantial elements of the facility such as the antenna tower, equipment shelter or fenced enclosures are shared. Co-location includes replacement of an existing tower with one capable of supporting additional antennas.
5. Ground-mounted. Supported directly on the ground, or on a structure not more than 10 feet tall erected to support one or more antennas.
6. Flush-mounted. Attached to the face of the antenna support structure, existing building or structure such that no portion of the antenna extends above the height of the support structure or building. Where a maximum flush mounting distance is given, that distance shall be measured from the outside edge of the antenna support structure, existing building or structure to the nearest inside edge of the antenna.
7. Radio frequency radiation. Electromagnetic radiation in the portion of the spectrum from 3 kilohertz (kHz) to 300 gigahertz (GHz).
8. Stealth design. Design techniques that blend the facility or additions with the natural or man-made environment in such a manner as to be effectively unnoticeable.
9. Stealth Structure. A self-supporting antenna tower designed to closely resemble a commonplace object that effectively blends with its surroundings.
10. Tower. See "antenna tower".
11. Tower mounted. Attached to and supported by an antenna tower.
12. Wireless communications. The transmission and/or reception of information through space using electromagnetic energy.
13. Wireless communications facility. Structures and/or equipment, including antennas, antenna towers, equipment cabinets, buildings, generators, fencing, access roads and the land upon which they are situated, associated with wireless communications.