Section 7: Telecommunication Uses

(orig. 6-29-04)

A. Intent and Purpose

This section is intended to ensure the provision of transmitted telecommunication services while promoting public safety, security, and general welfare. The specific intent is to provide clear regulations governing the allowance, design, installation and maintenance of telecommunications facilities consistent with federal and state statutes and regulations. (orig. 6-29-04)

B. General Provisions

1. Applicability

   a. New towers, other antenna support structures, antennas and associated equipment. All new towers or antennas in Jefferson County shall be subject to these regulations, except as provided in Section B.1.c. (orig. 6-29-04)

   b. Preexisting Towers or Antennas: Preexisting towers and preexisting antennas, for which a permit has been properly issued prior to date of enactment of this resolution, shall not be required to meet the requirements of this section. Changes, alterations, modifications and additions to pre-existing telecommunication facilities not specifically allowed by previous zoning or telecommunications permit shall meet the applicable requirements of this section. (orig. 6-29-04)

   c. Exemptions:

      (1) Fixed Wireless: Fixed wireless facilities, as defined by the Federal Communications Commission, shall be allowed in all zone districts. Fixed wireless facilities may be mounted on a residence without a telecommunications permit if service is provided to that residence but must otherwise comply with “Highest Design Standards”. (orig. 6-29-04)

      (2) OTARD. Over the air reception devices (OTARD), as defined by the Federal Communications Commission, shall not be required to meet the requirements of this section. (orig. 6-29-04)

      (3) High Voltage Electrical Transmission Towers: Personal Wireless Service (PWS) facilities may be located on existing high voltage electrical transmission towers in any zone district at any height so long as no portion of the PWS facility exceeds the existing height of the utility tower. Such installations and associated equipment shall comply with all telecommunications permit requirements, shall paint antennas to match the structure (usually flat medium gray) and shall screen all accessory equipment. (orig. 6-29-04)

      (4) Government Facilities: The use of property owned by the government of the United States, State of Colorado or any political subdivision thereof for telecommunications purposes shall comply with the General Provisions Section of this Zoning Resolution, “Applicability to Government Facilities”. For the purposes of this section, “government facilities” shall be construed to include Special Districts. (orig. 6-29-04; am. 4-4-06)

      (5) Amateur radio facilities that comply with Section C.2.b(2) and C.2.b(3)(a), “Permitted Uses for Amateur Radio”, shall be exempt from Telecommunications Permit requirements. (orig. 6-29-04)

2. Regulation

   a. Nothing in this section precludes compliance with the specific zone district regulations, other regulations within this Zoning Resolution or other County regulations, or with State and Federal standards and regulations as they may exist. Where Federal, State or County requirements conflict with the provisions of this section, the more restrictive standard shall apply. If such

State and Federal standards and regulations are changed, then the owners of the telecommunication facility governed by this section shall bring such telecommunication facility into compliance with such revised standards and regulations within the time period mandated by the controlling State or Federal agency. Failure to meet such revised standards and regulations shall constitute grounds for the removal of the telecommunication facility at the owner's expense. (orig. 6-29-04)

b. The provisions of this section are not intended to prevent the use of any design, material or method of installation not specifically proscribed by this section provided any such alternate has been approved by the Director of Planning and Zoning. An alternate may be approved if the proposed design, material or method is equal to or better than the specific requirements of this section and complies with the intent of this section and such modifications are consistent with the overall intent of the Zoning Resolution, the Land Development Regulation, Plat and Exemption From Platting restrictions, Site Development Plan, and zoning conditions, and do not result in adverse impacts that were not previously considered. (orig. 6-29-04; am. 12-21-10)

3. Procedures

a. Administrative Review

General: The following provisions shall govern the issuance of administrative approval of Telecommunications Permits for towers, antennas and associated facilities and equipment. (orig. 6-29-04)

(1) The following uses may be approved by the Zoning Administrator or his/her appointed designee after conducting an administrative review: (orig. 6-29-04)

(a) Placement of any PWS tower, antenna, or associated equipment used in connection with said tower or antenna, in any industrial or heavy commercial zone districts, as indicated in Table 7-1. (orig. 6-29-04)

(b) Placement of any PWS tower, antenna, or associated equipment in a zone district other than industrial or heavy commercial as allowed in Table 7-1 that is in conformance with requirements for Highest Design Standards for allowed uses. (orig. 6-29-04)

(c) Placement of any tower, antenna or associated equipment in connection with said tower or antenna on any property with an approved Planned Development, approved Special Use or zone district allowance to the extent telecommunication uses are allowed by such approved Planned Development or Special Use. (orig. 6-29-04)

(2) Each applicant for administrative review shall apply to the Zoning Administrator or his/her appointed designee providing the information set forth in this Regulation and a nonrefundable fee as established by resolution of the Board of County Commissioners. (orig. 6-29-04)

(3) The Zoning Administrator or his/her appointed designee shall review the application for Telecommunications Permit and determine if the proposed use(s) complies with this Regulation. (orig. 6-29-04)

(4) The Zoning Administrator or his/her appointed designee shall respond to each such application within 30 calendar days after receiving a complete application by approving, conditionally approving, or denying the application, or requesting additional information necessary to evaluate the application. (orig. 6-29-04)

(5) Applicants may appeal a denial of a Telecommunications Permit in accordance with the Board of Adjustment section of this Zoning Resolution. (orig. 6-29-04; am. 3-26-13)

b. Telecommunications Permits

(1) Telecommunications Permit applications shall be accepted, reviewed and processed pursuant to the Miscellaneous Permit process outlined in the General Provisions and Regulations section of this Zoning Resolution, except as modified here. (orig. 6-29-04; am. 4-20-10; am. 3-26-13)

(2) Telecommunications Permit Requirements:

(a) It shall be unlawful for any person, firm, or corporation to erect, construct, change, alter, modify or add to a telecommunications tower, other antenna support structure, antenna or accessory structure without first obtaining a permit from Planning and Zoning. (orig. 6-29-04; 5-20-08)

(b) The permit application shall include, in addition to other requirements, the following: (orig.6-7-94; am. 6-29-04)

(b-1) A site plan that shows the shape, size, and location of all existing and proposed transmission structures, guy wire anchors, warning signs, fencing, and access restrictions. (orig. 6-7-94; am. 6-29-04; am. 4-20-10)

(b-2) The number, type and size of antenna that can be accommodated. (orig. 6-7-94; am. 6-29-04)

(b-3) A report by a licensed professional engineer demonstrating compliance with applicable structural standards and the general structural capacity of the proposed facility. (orig. 6-7-94; am. 6-29-04)

(b-3-a) The specific proposed antenna support structure shall be engineered, constructed, installed and maintained to withstand the normal wind and vertical loads, plus safety loads, for the specific proposed location and for the specific wind load size, as defined and specified in TIA/ EIA RS-222 in force at the time of application. (orig. 6-29-04)

(b-3-b) The proposed antenna support structure shall be electrically grounded per the International Electrical Code in force at time of application, and consistent with normal radio engineering practices. (orig. 6-29-04)

(b-4) A fee in an amount established by the Board of County Commissioners will be charged for each permit application. (orig. 6-7-94; a.m. 6-29-04)

(b-5) A report that includes the following, if applicable, and if requested by the County: (orig. 6-7-94; a.m. 6-29-04)

(b-5-a) A description of any proposed telecommunications facility including elevations depicting all proposed antennas, platforms, finish materials and colors, accessory equipment and height above grade. (orig. 5-11-93; am. 6-7-94; am. 6-29-04; am. 4-20-10)

(b-5-b) A landscaping and/or visual mitigation plan (to scale) acceptable to the Zoning Administrator or his/her appointed designee, detailing how screening from the public view will be accomplished. This may include, but is not limited to, a visual study containing a view shed map depicting where within a three mile radius any portion of the proposed facility could be seen, and cross sectional views and photographic simulations showing the appearance of the proposed tower and accessory structures from up to five points within the view shed, such points to be mutually agreed upon by Planning and Zoning and applicant. This provision shall not apply to the granting

of telecommunications permits for amateur radio facilities. (orig.6-7-94; am. 12-17-02; am. 6-29-04; am. 5-20-08)

(b-5-c) An erosion control and revegetation plan. (orig. 6-7-94; am. 6-29-04)

(b-5-d) A performance guarantee, in an amount acceptable to Planning and Zoning and in a form acceptable to the County Attorney's Office, to ensure the landscaping, screening, erosion, and revegetation plans are completed. (orig.6-7-94; am. 6-29-04; am. 5-20-08)

(b-6) The Board of County Commissioners, the Planning Commission and/or Planning and Zoning staff may require the applicant for a telecommunication tower or other telecommunication facility to submit funds in escrow to pay for expert review of technical submissions by the applicant. This review may include expert review of engineering reports/data and, in the case of telecommunication towers, financial data concerning the costs of modifying existing towers and ameliorating interference, to the extent allowed by state and federal regulation and statute. The applicant shall be required to reimburse the county for all costs of expert review, regardless of whether escrow was required or the amount of funds required to be submitted in escrow. This provision shall not apply to the granting of telecommunications permits for amateur radio facilities. (orig. 6-7-94; am. 6-29-04; am. 5-20-08)

(b-7) Inventory of Existing Sites. Each applicant for a telecommunication facility shall provide to Planning and Zoning a narrative and map description of the applicant's/provider exists and then currently proposed telecommunications facilities within the County. This shall include the physical location and general description of the site (e.g. 50’ monopole camouflaged as a pine tree at 123 Main St.). This provision is not intended to be a requirement that the applicant submit its business plan, proprietary information, or make commitments regarding the future location of facilities within the County. This provision shall not apply to the granting of telecommunications permits for amateur radio facilities. (orig. 6-29-04;am. 5-20-08)

(b-8) Calculations, maps or such other information as is necessary to demonstrate that the cumulative effect of proposed sources of NIER when added to existing NIER sources will comply with the standard set forth in FCC OET Bulletin No. 65 and ANSI C95.1 or any revision thereto, or any other adopted County standard. Any facility that will operate at less than 1000 watts of radio frequency effective radiated power per antenna or otherwise determined by FCC definition to be categorically excluded from having to determine compliance with RF exposure standards is exempt from this requirement unless its NIER emission, when added to existing ambient NIER sources, will exceed the levels set forth in the above standard. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(b-9) Upon completion of construction, the applicant shall submit to the County an “as-built” plan prepared by a licensed Engineer in the State of Colorado. Such plans shall include a complete survey of the location of the telecommunication facility and accessory equipment; elevation drawings of the number, type, size, and dimensions of the antennas and support structures; and photographic evidence of compliance with the approved finished materials and colors. (orig. 4-20-10)

(3) Decision. The Zoning Administrator or his/her appointed designee shall review the telecommunications permit application and determine if the proposed use complies with this ordinance. The Zoning Administrator or his/her appointed designee shall respond to each such application within 30 calendar days after receiving a complete application by either approving or denying the application, or requesting additional information necessary to evaluate the application. Any decision to deny an application for a telecommunication facility shall be in writing and supported by substantial evidence in a written record. (orig. 6-29-04)

(4) Appeal. In the event an applicant is aggrieved by the determination of the Zoning Administrator or his/her appointed designee, the applicant may appeal to the Board of Adjustment pursuant to the Board of Adjustment Section of this Zoning Resolution. (orig. 6-29-04; am. 4-4-06)

4. Maintenance and Radio Frequency Measurement

a. Removal of Abandoned Antennas and Towers: Any antenna or tower that is not operated for a continuous period of 6 months shall be considered abandoned, and the owner of such antenna or tower shall remove the same within 30 calendar days of receipt of notice from Jefferson County notifying the owner of such abandonment. Failure to remove an abandoned antenna or tower within 30 calendar days shall be grounds to remove the tower or antenna at the owner's expense and any Special Use or Rezoning site plan approving the telecommunication facility shall be deemed to have expired. If there are two or more users of a single tower, then this provision shall not become effective until all users cease using the tower. (orig. 6-29-04)

b. Nonconforming Uses: Nonconforming telecommunications and associated uses shall be subject to the procedures and requirements of the Non-Conforming Buildings, Structures and Uses Section of this Zoning Resolution. (orig. 6-29-04; am. 4-4-06)

c. Radio Frequency Emissions Standards and Procedures (orig. 6-29-04)

(1) Radio Frequency Emissions Standards and procedures for Amateur Radio: The FCC requires all amateur radio operators to calculate RF emissions to ensure compliance with OET Bulletin 65. If concerns are raised by staff or the community regarding RF emission levels, an amateur radio operator shall produce their calculations as proof of compliance. If an amateur radio site cannot demonstrate that RF emission standards will be met, the County shall require RF measurements. If the results of such measurements indicate emissions are in violation of accepted standards, the County shall notify the FCC and the landowner of the zoning violation and process the offense in accordance with County policy. (orig. 6-29-04)

(2) Radio Frequency Emissions Standards and Procedures for all other Telecommunications Uses:

(a) A new source of Non-ionizing Electromagnetic Radiation Standards (NIER) or increase in NIER from an existing source, when combined with existing sources of NIER, shall not expose the general public to ambient radiation exceeding that defined in FCC OET Bulletin No. 65 and ANSI C95.1; provided, however, that if a federal or local standard is adopted that is more stringent than the standard set forth herein, such other standard shall apply. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(b) Before establishing a new source of NIER or changing an existing NIER source that exceeds 1000 watts of radio frequency effective radiated power per antenna in a way that increases the amount or changes the radiation pattern of NIER, an applicant shall submit the following information. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(b-1) Frequency, antenna gain, azimuth and elevation antenna patterns, power output of transmitter and effective radiated power. (orig. 5-11-93; am. 6-29-04)

(b-2) Type of modulation and class of service. (orig. 5-11-93; am. 6-29-04)

(b-3) Location of the antenna by geographical coordinates, including center of radiation (COR) and height above grade. (orig. 5-11-93; am. 6-29-04)

(b-4) Horizontal and radial distance from the NIER source to the nearest habitable space regularly occupied by persons other than employees of the transmitter, antenna, and/or tower owner, and the points on and off the property with the highest calculated NIER levels from the proposed new source in combination with existing sources (this may be shown in graphic form). The party responsible for the new NIER source shall measure the NIER level at up to 12 sites selected by mutual agreement of the applicant, the resident community, and Planning and Zoning. (orig. 5-11-93; am. 6-29-04; am. 5-20-08)

(b-5) Ambient NIER levels and calculated cumulative NIER levels after establishment of the proposed new or changed NIER source measured at the locations set forth in the preceding paragraph. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(c) Calculations and measurements of NIER will not be required for any new source of NIER if the facility will either operate at 1000 watts of radio frequency effective radiated power or less or if the total radio frequency power into the antenna is 15 watts or less or is otherwise determined by FCC definition to be categorically excluded from having to determine compliance with RF exposure standards. Calculations and measurements of NIER will be required for any new source of NIER. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(d) Field measurements documenting that facilities covered by this section comply with the applicable standard set forth herein shall be submitted to Planning and Zoning within 90 calendar days after each installation, whether new or modified, becomes operational and is functioning at its maximum approved power. (orig. 5-11-93; am. 10-15-02; am. 6-29-04; am. 5-20-08)

5. Rezoning / Special Use for Telecommunications Uses, General:

a. The following applies to all telecommunications towers and facilities that are not allowed as a use by right. (orig. 5-11-93; am. 6-29-04)

(1) Applications for Special Use or Rezoning for telecommunication facilities shall be subject to the administrative provisions pertaining to Special Uses and Rezoning outlined in the Administrative Provisions section of this Zoning Resolution, except as modified here. (orig. 6-29-04; am. 3-26-13)

(2) Unless otherwise allowed by this Zoning Resolution, all new telecommunications towers, antennas and accessory facilities and any increase in the size of a legal nonconforming telecommunications tower must be submitted for Rezoning to Planned Development or for Special Use approval. (orig.5-11-93; am. 6-7-94; am. 12-17-02; am. 6-29-04)

(3) Unless in conflict with the Official Development Plan or Special Use approval, additional antennas and equipment may be added to a facility that has received zoning or Special Use approval from the Board of County Commissioners. Existing antennas on an approved facility may be modified and the power output of existing antennas on an approved facility may be increased without a hearing, provided the standards and procedures outlined in ANSI standard C-95.1 or any revisions thereto, County regulations concerning non-ionizing electromagnetic radiation, FCC OET Bulletin No. 65 and Electronics Industries Association (EIA)-RS 222 (F), or the latest revision thereof, are complied with. Following the issuance of an appropriate permit, Planning and Zoning shall then be notified within 14 calendar days of the date when a permitted change in or addition of antennas with an effective radiated power in excess of 1,000 watts occurs. Planning and Zoning may request copies of plans depicting such modification and other

evidence necessary to demonstrate that such modification is in compliance with the provisions of this section and with the Official Development Plan or Special Use approval. (orig. 5-11-93; am. 10-15-02; am. 12-17-02; am. 6-29-04; am. 5-20-08)

(4) Any modifications to approved facilities must be consistent with the specifications in TIA/EIA – RS 222 in its current adopted revision. Planning and Zoning must be notified at least 30 calendar days prior to any modification to increase the wind or weight loading capacity, height, or footprint of a tower, and may request copies of plans depicting such modification and other evidence necessary to demonstrate that such modifications are in compliance with the provisions of this section and with the Official Development Plan or Special Use approval. (orig. 5-11-93; am. 6-29-04; am. 5-20-08)

b. Planned Development and Special Use For Telecommunication Facilities: The purpose of the Planned Development and Special Use is to minimize adverse visual effects of towers through careful design, siting, and vegetative screening; to maximize the use of any existing telecommunications facility in order to reduce the total number of towers needed to serve the telecommunications needs of the area; and to site and design towers so that electromagnetic radiation emissions to which the public will be exposed do not exceed safe levels. (orig. 5-11-93; am. 6-29-04)

(1) Application Requirements: All Rezoning and Special Use applications must contain the following materials, however, failure to submit a complete application shall not deprive the Planning Commission or the Board of County Commissioners of jurisdiction to consider the application. These application requirements are not intended to specify criteria for decision. (orig. 5-11-93; am. 6-29-04)

(a) Site plan(s) drawn to scale identifying the site boundary; tower(s); guy wire anchors; existing and proposed structures, including accessory structures; existing and proposed ground-mounted equipment; vehicular parking and access; and uses. (orig. 5-11-93; am. 6-29-04)

(b) A landscape plan drawn to scale generally showing proposed landscaping, including species type, size, spacing, other landscape features, and existing vegetation to be retained, removed or replaced. (orig. 5-11-93; am. 6-29-04)

(c) A report from a qualified individual(s) containing the following, which report shall not limit the tower height or design or the number and type of antennas that shall be permitted unless expressly so stated in the Official Development Plan (ODP) or Special Use approval. (orig. 5-11-93; am. 6-29-04)

(c-1) A description of the tower and the technical and other reasons for the tower design. (orig. 5-11-93; am. 6-29-04)

(c-2) Documentation to establish that the tower has sufficient structural integrity for the proposed uses at the proposed location and meets the minimum safety requirements and margins in TIA/EIA-RS 222 in its current adopted revision. (orig. 5-11-93; am. 6-29-04)

(c-3) The general capacity of the tower in terms of the number and type of antennas it is designed to accommodate. (orig. 5-11-93; am. 6-29-04)

(c-4) Calculations, maps or such other information as is necessary to demonstrate that the cumulative effect of proposed sources of NIER when added to existing NIER sources will comply with the standard set forth in FCC OET Bulletin No. 65 and ANSI C95.1 or any revision thereto, or any other adopted County standard. Any facility that will operate at less than 1000 watts of radio frequency effective radiated power per antenna is exempt from this requirement unless its NIER emission, when added to existing ambient NIER sources, will exceed the levels set forth in the above standard. (orig. 5-11-93; am. 10-15- 02; am. 6-29-04)

(d) A letter of intent stating whether the applicant intends to lease excess space on the tower to other potential users at reasonable rental rates and on reasonable terms. The letter of intent and the Official Development Plan shall be recorded with the County Clerk and Recorder prior to issuance of a Building Permit. The letter shall commit the tower owner and successors in interest to do the following. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(d-1) Respond in a timely, comprehensive manner to a request for information. (orig. 5-11-93; am. 6-29-04)

(d-2) Negotiate in good faith for shared use by third parties. An owner may negotiate with a party who has received an FCC license or construction permit before doing so with other parties. (orig. 5-11-93; am. 6-29-04)

(d-3) Allow shared use if an applicant agrees in writing to pay reasonable rental charges or other consideration and to pay all costs of adapting the tower or existing users' equipment to accommodate a shared user without causing cost prohibitive correctable electromagnetic interference to collocated facilities or causing NIER emissions in excess of levels set forth in FCC OET Bulletin No. 65 and ANSI C-95.1 or any revision thereto, and can otherwise agree on reasonable business terms and conditions for shared use of the tower. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(d-4) Make no more than a reasonable charge for shared use based on generally accepted accounting principles. (orig. 5-11-93; am. 6-29-04)

(e) Proof of ownership of the proposed site or authorization to rezone the parcel from the owner of the proposed site. (orig. 5-11-93; am. 6-29-04)

(f) Copies of any easements necessary for access, guy wire anchors or other off-site uses. (orig. 5-11-93; am. 6-29-04)

(g) A visual study containing, at a minimum, a view shed map depicting where within a three mile radius any portion of the proposed tower could be seen, and a photographic simulation showing the appearance of the proposed tower and accessory structures from up to five points within the view shed. Such points shall be mutually agreed upon by Planning and Zoning and applicant and shall consider topography limiting views. (orig. 5-11-93; am. 12-17-02; am. 6-29-04; am. 5-20-08)

(h) An analysis of the area to be rezoned containing the following. (orig. 5-11-93; am. 6-29-04)

(h-1) Existing topographical contours based on the best available existing maps. (orig. 5-11-93; am. 6-29-04)

(h-2) Bodies of water and intermittent or perennial streams. (orig. 5-11-93; am. 6-29-04)

(h-3) Rock outcroppings and major ridgelines. (orig. 5-11-93; am. 6-29-04)

(h-4) Major vegetation masses. (orig. 5-11-93; am. 6-29-04)

(h-5) Existing roads and structures. (orig. 5-11-93; am. 6-29-04)

(h-6) Existing easements or rights-of-way (e.g., utility, irrigation, access, etc.) on or contiguous to the site. (orig. 5-11-93; am. 6-29-04)

(h-7) Identified mineral resource areas. (orig. 5-11-93; am. 6-29-04)

(h-8) Where the area in which construction will occur contains slopes greater than

10 percent, a slope analysis of the area affected by construction depicting locations and direction of slope faces for slopes within the following categories: 0-8 percent, 8-15 percent, 15-22 percent, 22-30 percent, greater than 30 percent. (orig. 5-11-93; am. 6-29-04)

(h-9) Floodplains, as designated by the Urban Drainage and Flood Control District or other agency, and overlay zoned floodplain (FPS) areas. (orig. 5-11-93; am. 6-29-04)

(h-10) Areas within the Geologic Hazard (GH) Overlay Zone. (orig. 5-11-93; am. 6-29-04)

(h-11) Location of other potential hazards such as wildfire, geologic, airport or radiological hazards. (orig. 5-11-93; am. 6-29-04)

(h-12) Location of special resources such as wildlife, historic structures, and archaeologically significant remains. (orig.5-11-93; am. 6-29-04)

(i) Elevations of the proposed tower and accessory building generally depicting all proposed antennas, platforms, finish materials, and all other accessory equipment. (orig. 5-11-93; am. 6-29-04)

(j) The County may require the applicant to place funds in escrow to pay for expert review of technical submissions by the applicant, including expert review of engineering data and financial data concerning costs of modifying existing towers and costs of ameliorating interference to the extent allowed by law. Planning and Zoning shall recommend the amount of funds to be deposited based on the nature of the application and the anticipated complexity of review. Selection of the expert(s) shall be within the sole discretion of the County. The applicant shall be required to reimburse the County for all costs of expert review, regardless of whether escrow was required or the amount of funds required to be submitted in escrow. If the applicant fails to pay for the costs of expert review, the County may decline the application. Any escrow funds not utilized for expert review shall be returned to the applicant at the completion of the zoning case. The expert review of technical submissions shall address the following: (orig. 5-20-08)

(j-1) the accuracy and completeness of submissions; (orig. 6-29-04)

(j-2) the applicability of analysis techniques and methodologies; (orig. 6-29-04)

(j-3) the validity of conclusions reached; and (orig. 6-29-04)

(j-4) any specific technical issues designated by the Planning Commission or the Board of County Commissioners. (orig. 6-7-94; am. 6-29-04)

(2) Rezoning Review and Approval Process

General Criteria:

(a) In reviewing a proposal under this section, the Planning Commission and the Board of County Commissioners shall consider the compatibility of the proposal with existing and allowed land uses in the surrounding area; the County's Comprehensive Plan including but not limited to the applicable community plan or the General Land Use Plan and the Telecommunications Land Use Plan, according to the priorities set forth in the plans; the Local Government Land Use Control Enabling Act; the provisions of section 30-28-115, C.R.S., as amended, and any other applicable law, adopted public policies or plans, or studies presented as part of the zoning case. The Board has the sole discretion to determine what weight, if any, to give each of these factors. (orig. 5-11-93; am. 12-17-02; am. 6-29-04)

(b) If the Board of County Commissioners approves a Rezoning to Planned

Development pursuant to this section, the Board may impose such conditions on access, accessory structures, landscaping, tower coloring, lighting, design, size and siting as it deems necessary to render the proposal compatible with existing and allowed land uses in the surrounding area, to comply with the policies in the Jefferson County Comprehensive Plan or applicable land use plan, the Telecommunications Land Use Plan, its land use enabling authority, the laws, policies, plans and studies referenced above, except where such conditions are preempted by and conflict with regulations promulgated by the Federal Communications Commission or the Federal Aviation Administration, or where the Board of County Commissioners determines, based on evidence presented at the hearing, that such conditions would contravene sound engineering practices. (orig. 5-11-93; am. 6-29-04)

(3) Special Use Review and Approval Process:

In reviewing a special use proposal for telecommunications uses, the Board of County Commissioners shall consider the general Special Use criteria outlined in the General Provisions Section of this Zoning Resolution, except as amended by the standards of this section. If the Board of County Commissioners approves a Special Use pursuant to this section, the Board may impose such conditions on access, accessory structures, landscaping, tower coloring, lighting, design, size and siting as it deems necessary to mitigate deficiencies in complying with the Special Use criteria, except where such conditions are preempted by and conflict with regulations promulgated by the Federal Communications Commission or the Federal Aviation Administration, or where the Board of County Commissioners determines, based on evidence presented at the hearing, that such conditions would contravene sound engineering practices. (orig. 5-11-93; am. 6-29-04; am. 4-4-06)

6. General Standards

a. Federal Requirements: All telecommunication facilities shall meet the current standards and regulations of the FAA, the FCC, and any other agency of the federal government with the authority to regulate telecommunications facilities. If such standards and regulations are changed, then the owners of the telecommunications facility governed by this section shall bring such telecommunications facility into compliance with such revised standards and regulations within the time period mandated by the controlling federal agency. (orig. 6-29-04)

b. Structural Safety Standards: To ensure the structural integrity of towers, the owner of a tower shall ensure that it is maintained in compliance with standards contained in the applicable standards for towers that are published by the Telecommunications / Electronic Industries Association, as amended from time to time. (orig. 6-29-04)

c. Signs: No signs shall be allowed on an antenna or tower, except as required by the FCC or to notify the public of any associated hazard. (orig. 6-29-04)

C. Specific Standards

1. Personal Wireless Services (PWS)

a. Intent: The purpose and intent of this Regulation is to establish guidelines for the siting of PWS communications towers, antennas, and associated equipment in an effort to: (orig. 6-29-04)

(1) Enhance the ability of the providers of telecommunications services to provide such services to the community quickly, effectively, and efficiently; (orig. 6-29-04)

(2) Protect residential areas from potential visual impacts of towers and antennas; encourage users of towers, antennas and associated structures to configure them in a way that minimizes the visual impact of the towers and antennas through careful design, siting, landscape screening, and effective camouflaging techniques; (orig. 6-29-04)

(3) Encourage the location of facilities in rights of way; (orig. 6-29-04)

(4) Encourage the use of wall mounted panel antennas; encourage roof mounted antennas only when wall mounted antennas will not provide adequate service; (orig. 6-29-04)

(5) Minimize the total number of standard array type towers throughout the community; (orig. 6-29-04)

(6) Encourage the joint use of existing and future tower sites; (orig. 6-29-04)

(7) Provide applicants that meet Highest Design Standards in allowed zone districts with an administrative review process; and (orig. 6-29-04)

(8) Consider the public health and safety related to PWS facilities to the extent allowed by law. (orig. 6-29-04)

In furtherance of this intent, the County shall give due consideration to community plans in Rezoning cases, zoning maps, existing land uses, and environmentally sensitive areas in approving sites for the location of towers and antennas. (orig. 6-29-04)

b. Permitted Uses:

Not Essential Services: PWS facilities shall be regulated and permitted pursuant to this resolution and shall not be regulated or permitted as essential services, public utilities, or private utilities. (orig. 6-29-04)

Personal Wireless Services (PWS) are allowed as shown in the Personal Wireless Services Telecommunications Facilities Table. (orig. 6-29-04; am. 4-4-06)

Zone District	**Facilities meeting minimum Design Standards**	**Facilities meeting Highest Design Standards**
Residential		P[1]
R-3 (Multifamily)		P
R-3A (Multifamily)		P
R-4 (Multifamily)		P
RC-1		P
C-1 (Convenience)		P
C-1 (Neighborhood)		P
C-1 (Community)	P	P
C-1 (Regional)	P	P
C-2	P	P
I-1	P	P
I-2	P	P
I-3	P	P
I-4	P	P
A-1	SU	P[2]
A-2	SU	P[2]
A-35	SU	P[2]
Zone District	**Facilities meeting minimum Design Standards**	**Facilities meeting Highest Design Standards**
CD		P
C-O		P
PD	*	*

Rights of Way Dedicated to Jefferson County, the State of Colorado or the US Government. (all zone districts)		P

P = Permitted (Use by Right – administrative review of telecommunications permit)
$P^{1=}$ Restricted to "Non-Residential" uses within the zone district, and must be roof or building mounted per the Highest Design Criteria.
$P^{2=}$ Restricted to parcels that meet the current minimum lot size of the zone district.
SU = Special Use
Blank = Rezoning Required

* = Planned Developments – evaluated and approved on a case by case basis.

Facilities under the Highest Design Standards category(unless otherwise restricted) may be freestanding or roof or building mounted, but are held to more stringent design criteria.

(orig. 6-29-04, am. 4-20-10**)**

c. Accessory Uses: Applications for Special Use, Rezonings and Telecommunications Permits for PWS facilities under this section shall be subject to the procedures and requirements of the Accessory Uses Section of this Zoning Resolution regarding accessory uses, except as modified in this section. (orig. 6-29-04; am. 4-4-06)

d. Design Standards

(1) Minimum Design Standards. The guidelines set forth in this section shall constitute the minimum design standards applicable to the installation of all PWS telecommunication facilities in applicable zone districts: (orig. 6-29-04)

(a) The design of a telecommunication facility and any accessory equipment shall, to the extent possible, use materials, colors, textures, screening, and landscaping that will blend the telecommunication facility to the surrounding natural setting and built environment. (orig. 6-29-04)

(b) If an antenna is installed on a structure other than a tower, the antenna and supporting electrical and mechanical equipment must be of a flat sheen color that closely matches the color of the supporting structure so as to make the antenna and related equipment as visually unobtrusive as possible. (orig. 6-29-04)

(c) PWS telecommunication facilities shall not be artificially lighted, unless required by the FAA or other applicable governmental authority, or the facility is mounted on a light pole or other similar structure primarily used for lighting purposes. If lighting is required, such lighting shall be in accordance with the County's lighting standards outlined in the Lighting Section of this Zoning Resolution. (orig. 6-29-04; am. 4-4-06)

(d) No portion of any antenna may extend beyond the property line. (orig. 6-29-04)

(e) PWS facilities shall, where possible, be sited and/or designed to minimize their profile (e.g., accessory equipment located behind earthen berms). (orig. 6-29-04)

(f) Highest Design Standards may be required of any telecommunications facility where findings of particular sensitivity are made (e.g., proximity to historic or aesthetically significant structures and/or community features, adjacency to residential development). (orig. 6-29-04)

(g) Accessory equipment for a PWS telecommunication facility shall, at a minimum, meet the following requirements: (orig. 6-29-04)

(g-1) The buildings, shelters, cabinets, and other accessory components shall be grouped as closely as technically possible; (orig. 6-29-04)

(g-2) Total footprint coverage area of the applicant's accessory equipment shall not exceed 400 square feet; (orig. 6-29-04)

(g-3) No accessory equipment or accessory structure shall exceed 12 feet in height; (orig. 6-29-04)

(g-4) Accessory telecommunications equipment such as vaults, equipment rooms, and equipment enclosures shall be constructed out of non-reflective materials (visible exterior surfaces only); (orig. 6-29-04)

(g-5) Design, materials and colors of all structures shall be compatible with structures and vegetation on the same parcel and adjacent parcels, and shall not reduce the parking requirements and landscaped area for other principal uses on the parcel; (orig. 6-29-04)

(h) Anti-Climbing Design: PWS tower, monopole or other antenna support structure shall be enclosed by security fencing not less than six feet in height or equipped with an anti-climbing device or shall otherwise be designed so the facility cannot be climbed. (orig. 6-29-04)

(i) Landscaping: The following requirements shall govern the landscaping surrounding freestanding telecommunications facilities that do not meet highest design standards, provided, however, that the Zoning Administrator or his/her appointed designee may waive such requirements if the requirements of this section would thereby be better served. (orig. 6-29-04)

(i-1) Facilities shall be landscaped with a buffer of plant materials appropriate to the site context that effectively screens the views of the telecommunications facility use area from property used for residences. (orig. 6-29-04)

(i-2) Existing mature tree growth and natural land forms on the site shall be preserved to the maximum extent possible. (orig. 6-29-04)

(2) Highest Design Standards: PWS proposals qualify for a Telecommunications Permit if they comply with both the minimum and the highest design standards in an allowed zone district. Proposals that cannot meet Highest Design Standards in zone districts that require it may attempt to either Rezone to Planned Development, or apply for a Special Use if allowed within the zone district.

(a) Facilities qualify as meeting the classification of “Highest Design Standards” if they can be one of the following: (orig. 6-29-04; am 4-20-10)

(a-1) Concealed: Concealment requires that a facility be completely hidden from view within a structure likely to exist in, and architecturally compatible with an area, such as within a clock tower in a commercial area. (orig. 6-29-04)

(a-2) Camouflaged: Effective camouflage requires telecommunications facilities be one of the following: (orig. 6-29-04)

(a-2-a) Disguised so that they appear to be something other than a telecommunications facility, and is at the same time compatible with its surroundings (e.g. a natural looking ponderosa pine in a pine forested area or a properly proportioned silo in an agricultural area). (orig. 6-29-04)

(a-2-b) Designed so that the facilities silhouette, mass and color are masked in such a way as to be virtually indistinguishable from their background. (orig. 6-29-04)

(a-3) Considered inherently compatible due to a facility’s minimal size. Antennas will generally be no more than 18” in diameter or diagonal measurement. Antennas and other equipment shall be painted to match the structure to

which they are mounted. If the equipment cannot be painted for technical reasons, it should be screened by material that matches the background. If it can be demonstrated that the equipment can neither be screened nor painted, the Zoning Administrator or his/her appointed designee shall have the authority to waive these painting/screening requirements on a case by case basis. (orig. 6-29-04; am. 4-20-10)

(b) Fixed wireless equipment mounted on a residence to service residence(s) are exempt from the single family zoning use exclusion and telecommunications permit requirements, but shall otherwise meet all Highest Design Standard criteria. (orig. 6-29-04)

(c) Compatibility: In every case, design and installation of telecommunications facilities must be compatible with the aesthetics of the surrounding environment (e.g., no faux ponderosas standing in an empty field, no “flagpole” concealment monopoles out of scale with “real” flagpoles.). Siting and design must take full advantage of all screening opportunities to render the facility innocuous, including topography, landscaping, and the preservation of existing tree cover. Design and placement of roof or wall mounted panels must appear integral to the architecture of the building. (orig. 6-29-04)

(d) Maintenance: Such facilities shall be maintained so as to comply with “Highest Design Standards” over time. (orig. 6-29-04)

(e) Examples of facilities which would and would not meet highest design standards are provided for illustrative purposes. Refer to the Telecommunications Land Use Plan for further examples. (orig. 6-29-04)

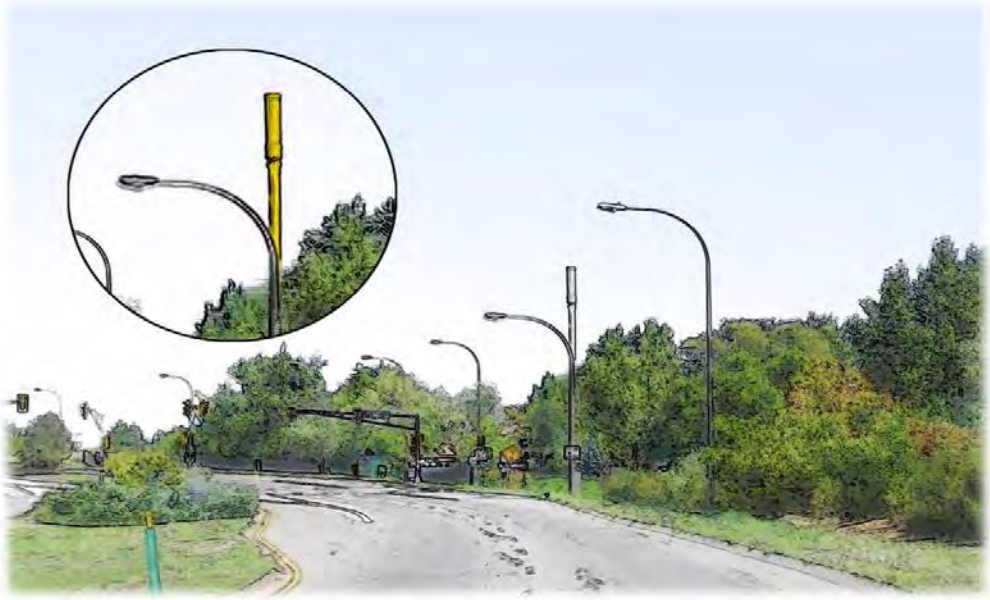
Unacceptable Siting and Design: lack of screening and architectural integration. (orig. 6-29-04)

Unacceptable Siting and Design: “monopine” incompatible with surroundings. (orig. 6-29-04)

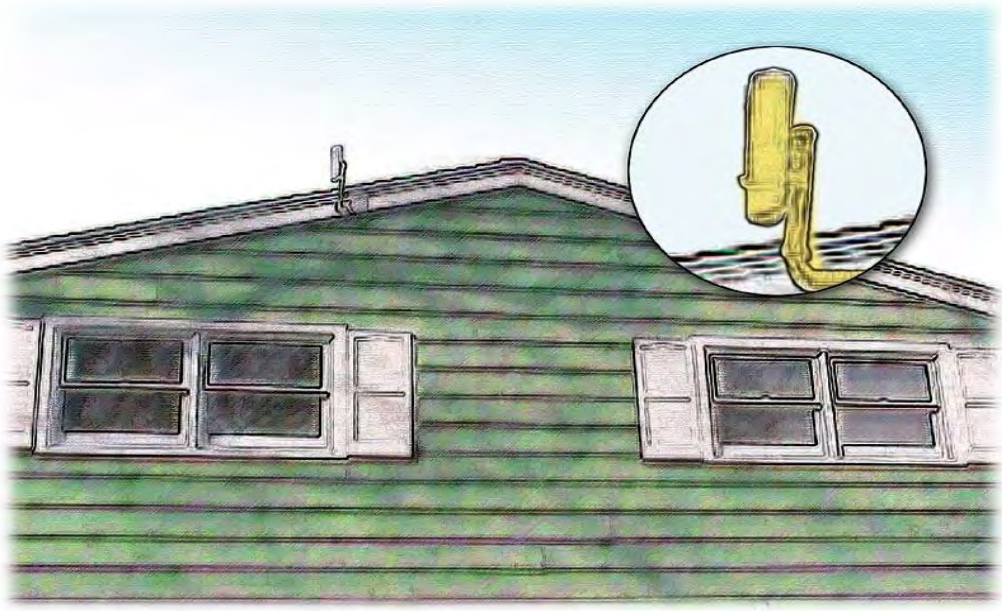
Acceptable Siting and Design: would meet highest deign standards. “monopine” left of center effectively camouflaged and compatible with surroundings. (orig. 6-29-04)

Acceptable Siting and Design: would meet highest design standards. Panel antennas innocuous within the context of a high voltage utility tower (antennas highlighted for illustration purposes). (orig. 6-29-04)

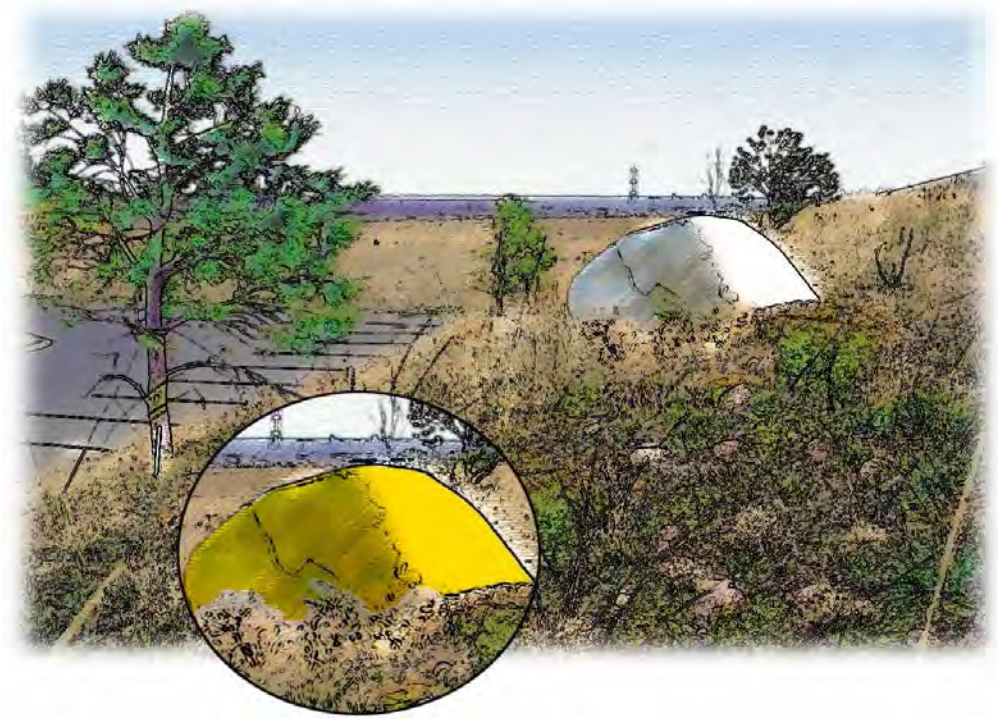
Acceptable Siting and Design: would meet highest design standards. Panel antennas effectively camouflaged and integrated into the building's architecture (antennas highlighted for illustration purposes). (orig. 6-29-04)



Acceptable Siting and Design: would meet highest design standards. Light pole in context with existing light poles, antenna mount in scale and compatible with right of way utilities. (orig. 6-29-04)



Acceptable Siting and Design: would meet highest design standards. Antenna for fixed wireless services compatible by virtue of diminutive scale and minimal visual impact. (orig. 6-29-04)



Acceptable Siting and Design: would meet highest design standards. Panel antennas completely concealed within false boulder. (orig. 6-29-04)

e. Specific Requirements:

The following regulations shall apply to all PWS telecommunications facilities that are allowed by this Zoning Resolution as a permitted use or Special Use. See Table 7-1 and permitted uses in specific zone districts for additional regulations. (orig. 6-7-94; am. 6-29-04)

(1) Roof and/or building mounted PWS telecommunications facilities, (provided the building is not accessory to the antennas): (orig. 6-29-04)

(a) Roof mounted facilities shall be approved only where an applicant demonstrates a wall mounted facility is inadequate to provide service. Such facilities shall be evaluated for approval based upon the following criteria: (orig. 6-29-04)

(a-1) Roof mounted telecommunications panel antennas shall be attached to an elevated penthouse, mechanical appurtenance or other elevated equivalent and painted to match their background or shall be screened in a manner compatible with the building architecture. (orig. 6-29-04)

(a-2) The facility, if allowed, may include up to a maximum of 4 whip antennas, a maximum of 3 inches in diameter, which may extend a maximum of 12 feet above the highest portion of the structure to which they are attached. (orig. 6-7-94; am. 6-29-04)

(a-3) A single telecommunications facility accessory building or equipment cabinet, not to exceed 350 square feet Gross Floor Area (GFA), may be constructed, provided that it is either concealed or camouflaged. (orig. 6-7-94; am. 6-29-04)

(a-4) If an accessory equipment shelter is present, it must blend with the surrounding building(s) in architectural character or color. (orig. 6-7-94; am. 6-29-04)

(a-5) Telecommunication accessory equipment shall not be sited on the roof of a building unless the equipment can be screened with walls taller than the equipment being screened. The screening of rooftop equipment shall be with architectural elements designed as an integral part of the building. In no case shall accessory equipment be permitted on a sloped roof. (orig. 6-29-04)

(b) Building façade mounted: The maximum protrusion of facilities from the building or structure face to which they are attached shall be 1.5 feet. (orig. 6-29-04)

(2) Freestanding PWS Antenna Support Structure:

(a) Maximum antenna support structure height plus antenna height: The same as that for a building or other structure within the applicable zone district. (orig. 6-7-94; am. 6-29-04)

(b) If the freestanding antenna support structure does not meet highest design standards, the maximum monopole diameter shall be 30 inches at the base tapering to the top, except in the I-1, I-2, I-3, and I-4 Zone Districts. (orig. 6-7-94; am. 6-29-04)

(c) If the freestanding antenna support structure does not meet highest design standards, the minimum setback when located within 250 feet of any property zoned for residential land use shall be twice the tower height or twice the minimum setback for an accessory building within the applicable standard zone district, whichever is greater. (orig. 6-7-94; am. 6-29-04)

(d) If the freestanding antenna support structure does not meet highest design standards, the minimum setback when not located within 250 feet of any property zoned for residential land use shall be the standard setback for a building or structure within the applicable standard zone district. (orig. 6-7-94; am. 6-29-04)

(e) The tower, antennas and accessory structures must be architecturally and visually (color, bulk, size) compatible with surrounding buildings, structures, vegetation, and/or uses in the area or those likely to exist under the underlying zoning. (orig. 6-7-94; am. 6-29-04)

(f) Accessory equipment for a freestanding telecommunication facility shall meet the following requirements: (orig. 6-29-04)

Antennas Mounted on Utility Poles or Light Poles: The equipment cabinet or structure used in association with antennas shall be located in accordance with the following: (orig. 6-29-04)

(f-1) In all cases, facilities must comply with county vision clearance triangle requirements, but shall otherwise be exempt from standard zone district setback requirements. (orig. 6-29-04; am. 5-20-08)

(f-2) Accessory equipment for facilities in the right-of-way may be located: (am. 4-4-06)

(f-2-a) In a front or side yard provided the cabinet or structure is no greater than 7 feet in height or 200 square feet of gross floor area and the cabinet/structure is located a minimum of 10 feet from all lot lines. The cabinet/structure shall be screened by an evergreen hedge with an ultimate height of at least 48 inches and a planted height of at least 36 inches or otherwise screened in a manner consistent with highest design standards. (orig. 6-29-04)

(f-2-b) In a rear yard, provided the cabinet or structure is no greater than 7 feet in height or 200 square feet in gross floor area. The cabinet/structure shall be screened by an evergreen hedge with an ultimate height of eight (8) feet and a planted height of at least 36 inches or otherwise screened in a manner consistent with highest design standards. (orig. 6-29-04)

f. Variances

(1) Proposals seeking a variance from the Board of Adjustment to exceed the underlying zone district height allowance shall conduct a drive test that demonstrates the requested height is necessary, and why no other sites will work with shorter towers. Drive tests shall start with the proposed height and continue in 5 foot increments until it shows that the height fails to provide adequate coverage. (orig. 6-29-04; am. 5-20-08)

(2) The Board of Adjustment and/or Planning and Zoning staff may require the applicant for Variance related to a telecommunication tower or other telecommunication facility application to submit funds in escrow to pay for expert review of technical submissions by the applicant, including expert review of engineering reports/data. (orig. 6-29-04; am. 5-20-08)

g. Rezoning Requirements Specific to PWS

PWS Rezoning applications shall be accepted, reviewed and processed pursuant to the Administrative Provisions outlined in the Administrative Provisions section of this Zoning Resolution, Planned Development provisions outlined in the Planned Development Section of this Zoning Resolution, and general telecommunications Rezoning provisions outlined in paragraph 7.3.b of this section, except as modified here. (orig. 6-29-04; am. 4-4-06; am. 3-26-13)

(1) Co-Location: In order to minimize overall visual impact to the community, all PWS telecommunication rezoning proposals for freestanding antenna support structures not conforming with “Highest Design Standards” shall be designed and constructed to permit the facility to accommodate the attachment of 2 additional telecommunication providers on the same freestanding facility. No telecommunication facility owner or operator shall unfairly exclude a telecommunication competitor from using the same facility or location. The following shall be accomplished for PWS rezoning proposals that do not meet Highest Design Standards: (orig. 6-29-04)

(a) The applicant must provide expert testimony that demonstrates to the satisfaction of the Board of County Commissioners that no existing telecommunications site is available to accommodate the equipment or purpose for which the tower or increase in height is proposed at a reasonable cost or other business terms. The need for structural or equipment modifications shall not alone be sufficient to demonstrate non-availability. Any one or more of the following shall be considered to demonstrate non-availability. (orig. 5-11-93; am. 6-29-04)

(a-1) Evidence with reference to EIA-RS 222, in its then current adopted revision, that the structural capacity of existing and approved towers cannot accommodate the planned equipment and cannot be reinforced to accommodate the planned equipment at a reasonable cost, or the owner of the site is unwilling to Rezone if necessary to accommodate a new user. The applicant shall be required to calculate the capacity of existing or approved towers based on information on file with the County or requested from the tower owner, if supplied. (orig. 5-11-93; am. 6-29-04)

(a-2) Evidence that the planned equipment may or will cause objectionable radio frequency interference with other existing or planned equipment on that tower, which cannot be ameliorated at a reasonable cost. (orig. 5-11-93; am. 6-29-04)

(a-3) Evidence that existing or approved towers do not have space to locate the planned equipment where it can function effectively and at the strength of signal required by the FCC. (orig. 5-11-93; am. 6-29-04)

(a-4) Evidence that the addition of the planned equipment to existing or approved towers would result in NIER levels in excess of those permitted by FCC OET Bulletin No. 65 and ANSI C95.1 or any revisions thereto, or any adopted local standard. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(a-5) Evidence that the fees and/or costs for shared use, including the cost to adapt existing facilities to the proposed use, exceed the cost of the proposed tower, or that the parties have not been able to reach agreement on reasonable business terms or other issues associated with locating on the tower. (orig. 5-11-93; am. 6-29-04)

(2) All new structures must be set back from the property line sufficient to prevent all ice-fall materials and debris from tower failure or collapse from falling onto occupied dwellings other than those occupied by the tower owner, and protect the public from NIER in excess of that allowed herein. Where more than one tower is located on a site, the set back between such towers shall be sufficient to prevent multiple failures in the event one tower fails. (orig. 5-11-93; am. 6-29-04)

(3) The tower must be designed to accommodate structurally multiple antennas if recommended by the Telecommunications Land Use Plan. (orig. 5-11-93; am. 12-17-02; am. 6-29-04)

(4) NIER emissions from the tower facility, when operating with maximum power output from all proposed antennas and transmitting facilities, may not exceed the level set forth in this Zoning Resolution. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(5) The written restrictions must state that at such time as there have not been any antennas on a tower or the use of the tower has been abandoned for 6 consecutive months, it will be removed within 180 days of the end of said 6 month period. (orig. 5-11-93; am. 6-29-04)

(6) Satisfaction of the minimum standards set forth above shall not entitle an applicant to approval of the rezoning if the Board of County Commissioners determines that rezoning should not be allowed pursuant to the General criteria for review. (orig. 5-11-93; am. 6-29-04)

(7) Proposals requesting to exceed the underlying zone district height allowance, either by variance or rezoning, shall conduct a drive test that demonstrates the requested height is necessary, and why no other sites will work with shorter towers. Drive tests shall start with the proposed height and continue in 5' increments until it shows that the height fails to provide adequate coverage. (orig. 6-29-04)

2. Amateur Radio

a. Intent:

The intent of this Regulation is to establish guidelines for the siting of amateur radio communications towers, antennas, and associated equipment in an effort to: (orig. 6-29-04)

(1) Reasonably accommodate amateur radio operations with minimum practicable regulation. (orig. 6-29-04)

(2) Encourage users of towers and antennas to configure them in a way that minimizes the visual impact of the towers and antennas through careful design and siting. (orig. 6-29-04)

(3) Consider the public health and safety related to amateur radio facilities to the extent allowed by law. (orig. 6-29-04)

b. Permitted Uses:

(1) Amateur radio facilities are allowed as an accessory use in all zone districts. (orig. 6-29-04)

(2) A Telecommunications Permit is required for all antenna support structures greater than 20 feet tall above ground level and for roof mounted antennas or antenna support structures greater than 10 feet above point of attachment. (orig. 6-29-04)

(3) Application for Telecommunications Permit shall include, in addition to other requirements, the following: A report by a registered professional engineer demonstrating compliance with TIA/ EIA RS-222 for the proposed facility and providing the maximum number, type, size, weight and wind load capacity of antenna that can be accommodated. Antennas may be changed, moved, removed, exchanged or added to at any time under an existing permit (i.e. without a new telecommunications permit) provided that the new antenna(s) are equal to or less than the maximum antenna weight and wind load of the permitted antenna(s), as provided for in the engineer's report. (orig. 6-29-04)

(4) Preexisting Towers or Antennas: Towers and antennas existing prior to the date of enactment of this resolution shall not be required to meet the requirements of this section. Changes, alterations, modifications and additions to pre-existing telecommunication facilities shall meet the applicable requirements of this section. (orig. 6-29-04)

c. Design Standards: The guidelines set forth in this section shall apply to the installation of all amateur radio facilities in applicable zone districts. (orig. 6-29-04)

(1) The design of an amateur radio facility and any accessory equipment shall, to the extent possible, use materials, colors, textures, screening, and landscaping that will blend the telecommunication facility to the surrounding natural setting and built environment. (orig. 6-29-04)

(2) If an antenna is installed on a structure other than a tower, the antenna and supporting electrical and mechanical equipment must be of a neutral color so as to make the antenna and related equipment as visually unobtrusive as possible. (orig. 6-29-04)

(3) Security Fencing / Anti-Climbing Devices. Antenna support structure shall be enclosed by security fencing not less than six feet in height or equipped with an anti-climbing device or shall otherwise be designed so the facility cannot be climbed. (orig. 6-29-04)

(4) Setback and Placement Location Limitations: No antenna or antenna support structure may be located so as to extend, move or swing beyond the plane of the property boundary at any time. Antenna guy wires and their foundations may be placed no closer than 5 feet from any property boundary, but are not otherwise regulated by the setbacks. (orig. 6-29-04)

(a) Setbacks: The standard zone district setback requirements for accessory uses shall apply to all antenna support structures, except facilities over 50 feet in height shall be setback from adjacent property lines equal to the height of the antenna support structure and any associated attachments. For crank up towers, setback allowances shall be determined based upon the fully retracted height of the tower and attached antennas. (orig. 6-29-04)

(b) Height and Location Requirements: The height of the antenna support structure and attachments shall be no greater than provided in the Amateur Radio Facilities: Height Setback and Location Requirements Table: (orig. 6-29-04; am. 4-4-06)

AMATEUR RADIO FACILITIES:
HEIGHT, SETBACK AND LOCATION REQUIREMENTS TABLE

PROPERTY SIZE	MAXIMUM HEIGHT	MAX. HEIGHT W/BONUS	SETBACKS	LOCATION
9000 s.f. or less	Zone District Allowance	N.A.	Zone District	Back yard
9001 s.f. to 21,780 s.f. (1/2 acre)	Zone District Allowance	crank up tower with antennas: 50 feet	Zone district	Back yard
21,781 s.f. (1/2 acre) to 87,121 s.f. (2 acres)	50 feet	crank up tower with antennas: 65 feet	Zone District	Back yard or side yard
87,122 s.f. (2 acres) to 217,800 s.f. (5 acres)	50 feet	crank up tower with antennas: 75 feet	standard zone district setback for towers less than or equal to zone district height allowance. All others a 1:1 ratio	Any Location
217,801 s.f. (5 acres) to 435,600 s.f. (10 acres)	75 feet	crank up tower with antennas: 100 feet	standard zone district setback for towers less than or equal to zone district height allowance. All others a 1:1 ratio	Any location
Greater than 435,600 s.f. (10 acres)	199 feet	N.A.	standard zone district setback for towers less than or equal to zone district height allowance. All others a 1:1 ratio	Any location

(5) Crank-up Antenna Towers: The use of crank up towers is encouraged to provide enhanced radio capability with minimized neighborhood impact. When employed, the crank up tower shall be kept in its lowest extension whenever it is not being used. (orig. 6-29-04)

(6) Roof, Chimney and Other Structure-mounted Antenna Support Structures: Antenna support structures attached to roofs, chimneys and other structures shall comply with County Building Codes. (orig. 6-29-04)

(7) Co-Location: No commercial uses shall be allowed to co-locate on amateur radio support structures. Amateur radio facilities, however, shall be allowed to co-locate on properly permitted commercial telecommunication facilities. (orig. 6-29-04)

d. Rezoning Requirements

(1) The following applies to all amateur telecommunications towers and facilities that are not allowed as a use by right in a standard zone district. Unless otherwise allowed by this Zoning Resolution, all new amateur telecommunications towers, antennas and accessory facilities and any increase in the size of a legal nonconforming telecommunications tower must be submitted for Rezoning to Planned Development. (orig. 5-11-93; am. 6-29-04)

(2) Applications for Rezonings for amateur facilities under this section shall be subject to the procedures and requirements of this Zoning Resolution, except as modified in Section 7.B.5.a., general provisions for telecommunications use rezonings. (orig. 6-29-04; am. 4-4-06)

3. Broadcast

a. Intent

b. Permitted Uses

(1) As provided in standard zone district allowances.

c. Accessory Uses

d. Design Standards

e. Special Use Requirements

f. Rezoning Requirements

(1) Applications for towers intended for transmitters that will broadcast at a power in excess of 1000 watts of radio frequency effective radiated power per antenna must include evidence that the applicant has contacted owners of all existing or approved towers and that the equipment for which the proposed tower is being constructed cannot be technologically or structurally accommodated on an existing or approved tower. Applicants for FM radio and high power UHF and VHF television station antennas shall only be required to contact the owners of towers whose height is 200 feet or greater, or whose towers can reasonably satisfy the requirements for height above average terrain (HAAT) and geographic location as set forth in their application and/or grant of construction authority from the FCC. Such evidence shall include the following. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(a) A list of contacts. (orig. 5-11-93; am. 6-29-04)

(b) The antenna specifications including, but not limited, to weight and wind loading requirements; length, width and height; and transmitter space requirements provided to the tower owner(s) or representative(s). (orig. 5-11-93; am. 6-29-04)

(c) Responses from each tower owner or representative setting forth the structural, technological or general business limitations on shared use of the existing tower, a statement as to whether the structural or technological impediment could be eliminated by strengthening the tower or enlarging the transmitter building, whether existing equipment could be protected from electromagnetic interference, and the projected cost of such alterations. Once this information has been submitted to the County, it will be available for use in future applications by other parties. (orig. 5-11-93; am. 6-29-04)

(2) The applicant shall provide expert testimony that demonstrates to the satisfaction of the Board of County Commissioners that no existing telecommunications site is available to accommodate the equipment or purpose for which the tower or increase in height is proposed at a reasonable cost or other business terms. The need for structural or equipment modifications shall not alone be sufficient to demonstrate non-availability. Any one or more of the following shall be considered to demonstrate non-availability. (orig. 5-11-93; am. 6-29-04)

(a) Evidence with reference to EIA-RS 222, in its then current adopted revision, that the structural capacity of existing and approved towers cannot accommodate the planned equipment and cannot be reinforced to accommodate the planned equipment at a reasonable cost, or the owner of the site is unwilling to Rezone if necessary to accommodate a new user. The applicant shall be required to calculate the capacity of existing or approved towers based on information on file with the County or requested from the tower owner, if supplied. (orig. 5-11-93; am. 6-29-04)

(b) Evidence that the planned equipment may or will cause objectionable radio frequency interference with other existing or planned equipment on that tower, which cannot be ameliorated at a reasonable cost. (orig. 5-11-93; am. 6-29-04)

(c) Evidence that existing or approved towers do not have space to locate the planned equipment where it can function effectively and at the strength of signal required by the FCC. (orig. 5-11-93; am. 6-29-04)

(d) Evidence that the addition of the planned equipment to existing or approved towers would result in NIER levels in excess of those permitted by FCC OET Bulletin No. 65 and ANSI C95.1 or any revisions thereto, or any adopted local standard. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(e) Evidence that the fees and/or costs for shared use, including the cost to adapt existing facilities to the proposed use, exceed the cost of the proposed tower, or that the parties have not been able to reach agreement on reasonable business terms or other issues associated with locating on the tower. (orig. 5-11-93; am. 6-29-04)

(3) All new structures must be set back from the property line sufficient to prevent all ice-fall materials and debris from tower failure or collapse from falling onto occupied dwellings other than those occupied by the tower owner, and protect the public from NIER in excess of that allowed herein. Where more than one tower is located on a site, the setback between such towers shall be sufficient to prevent multiple failures in the event one tower fails. (orig. 5-11-93; am. 6-29-04)

(4) The tower must be designed to accommodate structurally multiple antennas if recommended by the Telecommunications Land Use Plan. (orig. 5-11-93; am. 12-17-02; am. 6-29-04)

(5) NIER emissions from the tower facility, when operating with maximum power output from all proposed antennas and transmitting facilities, may not exceed the level set forth in this Zoning Resolution, as measured in accordance with methods published in FCC OET Bulletin No. 65 or any other applicable federal agency by qualified experts. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(6) The written restrictions must state that at such time as there have not been any antennas on a tower or the use of the tower has been abandoned for 6 consecutive months, it will be removed within 180 days of the end of said 6 month period. (orig. 5-11-93; am. 6-29-04)

(7) Satisfaction of the minimum standards set forth above shall not entitle an applicant to approval of the rezoning if the Board of County Commissioners determines that Rezoning should not be allowed pursuant to the General Criteria for review. (orig. 5-11-93; am. 6-29-04)

4. 2-Way Commercial, Earth Based Satellite, Other

a. Intent

b. Permitted Uses

(1) As provided in standard zone district allowances.

(2) Low power telecommunications facilities supporting fire department and sheriff's office communications needs shall be allowed in rights of way dedicated to the county, provided they comply with highest design standards. (orig. 6-29-04)

c. Accessory Uses

d. Design Standards

e. Special Use Requirements

f. Rezoning Requirements

(1) Applications for towers intended for transmitters that will broadcast at a power in excess of 1000 watts of radio frequency effective radiated power per antenna must include evidence that the applicant has contacted owners of all existing or approved towers and that the equipment for which the proposed tower is being constructed cannot be technologically or structurally accommodated on an existing or approved tower.

Applicants for FM radio and high power UHF and VHF television station antennas shall only be required to contact the owners of towers whose height is 200 feet or greater, or whose towers can reasonably satisfy the requirements for height above average terrain (HAAT) and geographic location as set forth in their application and/or grant of construction authority from the FCC. Such evidence shall include the following. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(a) A list of contacts. (orig. 5-11-93; am. 6-29-04)

(b) The antenna specifications including, but not limited, to weight and wind loading requirements; length, width and height; and transmitter space requirements provided to the tower owner(s) or representative(s). (orig. 5-11-93; am. 6-29-04)

(c) Responses from each tower owner or representative setting forth the structural, technological or general business limitations on shared use of the existing tower, a statement as to whether the structural or technological impediment could be eliminated by strengthening the tower or enlarging the transmitter building, whether existing equipment could be protected from electromagnetic interference, and the projected cost of such alterations. Once this information has been submitted to the County, it will be available for use in future applications by other parties. (orig. 5-11-93; am. 6-29-04)

(2) The applicant shall provide expert testimony that demonstrates to the satisfaction of the Board of County Commissioners that no existing telecommunications site is available to accommodate the equipment or purpose for which the tower or increase in height is proposed at a reasonable cost or other business terms. The need for structural or equipment modifications shall not alone be sufficient to demonstrate non-availability. Any one or more of the following shall be considered to demonstrate non-availability. (orig. 5-11-93; am. 6-29-04)

(a) Evidence with reference to EIA-RS 222, in its then current adopted revision, that the structural capacity of existing and approved towers cannot accommodate the planned equipment and cannot be reinforced to accommodate the planned equipment at a reasonable cost, or the owner of the site is unwilling to Rezone if necessary to accommodate a new user. The applicant shall be required to calculate the capacity of existing or approved towers based on information on file with the County or requested from the tower owner, if supplied. (orig. 5-11-93; am. 6-29-04)

(b) Evidence that the planned equipment may or will cause objectionable radio frequency interference with other existing or planned equipment on that tower, which cannot be ameliorated at a reasonable cost. (orig. 5-11-93; am. 6-29-04)

(c) Evidence that existing or approved towers do not have space to locate the planned equipment where it can function effectively and at the strength of signal required by the FCC. (orig. 5-11-93; am. 6-29-04)

(d) Evidence that the addition of the planned equipment to existing or approved towers would result in NIER levels in excess of those permitted by FCC OET Bulletin No. 65 and ANSI C95.1 or any revisions thereto, or any adopted local standard. (orig. 5-11-93; am. 10-15-02; am. 6-29-04)

(e) Evidence that the fees and/or costs for shared use, including the cost to adapt existing facilities to the proposed use, exceed the cost of the proposed tower, or that

the parties have not been able to reach agreement on reasonable business terms or other issues associated with locating on the tower. (orig. 5-11-93; am. 6-29-04)

(3) All new structures must be set back from the property line sufficient to prevent all ice-fall materials and debris from tower failure or collapse from falling onto occupied dwellings other than those occupied by the tower owner, and protect the public from NIER in excess of that allowed herein. Where more than one tower is located on a site, the setback between such towers shall be sufficient to prevent multiple failures in the event one tower fails. (orig. 5-11-93; am. 6-29-04)

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