CHAPTER 28

SITING OF WIRELESS TELECOMMUNICATIONS FACILITIES

Section	
28-1.	Purpose and scope.
28-2.	Definitions.
28-3.	Applicability.
28-4.	Site location master plan.
28-5.	Facility types and standards.
28-6.	Collocation of antennas.
28-7.	Location on residential lots
	prohibited.
28-8.	Color.
28-9.	Sites in foothills and canyons
28-10.	Interference with other
	communications.
28-11.	Notice to neighboring
	jurisdictions.
28-12.	Additional requirements.
28-13.	Accessory buildings.
28-14.	Non-maintained or abandoned
	facilities.
28-15.	Building permit required.

28-1. Purpose and scope.

- (1) The purpose of this chapter is to establish general requirements for the siting of wireless telecommunications facilities. The intent of this chapter is to:
- (a) promote the location of facilities in nonresidential areas;
- (b) minimize the total number of monopole facilities throughout the community;
- (c) encourage joint use and collocation as a primary option rather than construction of additional facilities;
- (d) promote the functional delivery of lowpower radio communications service with lower costs and increased efficiency by promoting competition between providers of low-power radio communications service;
- (e) encourage facilities providers to use innovative design to minimize adverse visual impact, promoting careful placement and siting, and requiring landscaping, screening, and camouflage techniques;
- (f) promote the long-term viability and adequacy of low-power radio communications service by requiring development plans showing the anticipated number of facilities required to provide service for the near future:
- (g) enhance telecommunication service providers' ability to provide such services to the community quickly, effectively, and efficiently.
- (2) This chapter addresses planning issues brought on by the rapid growth, continuing

development, and increasing demand of low-power radio communications. This chapter distinguishes low-power radio from other broadcast type telecommunication technologies and establishes provisions that deal with issues of demand, visual mitigation, noise, engineering, residential impacts, safety and facility siting. (Ord.2005-30, 11/22/05)

28-2. Definitions.

As used in this chapter:

- (a) "Applicant" means any individual person, group of persons, business entity or government unit applying for a permit to locate communications towers within the unincorporated areas of Tooele County.
- (b) "Antenna" means a transmitting or receiving device used in telecommunications that radiates or captures radio signals.
- (c) "Lattice tower" means a selfsupporting multiple-sided, open steel frame structure used to support telecommunications equipment.
- (d) "Monopole facility" means an antenna or series of individual antennas mounted on a single cylindrical pole, including associated equipment. For the purposes of this chapter, if a facility does not fit the definition of a roof- or wallmounted facility it shall be considered a monopole facility.
- (e) "Quantifiable detrimental impacts" means specific problems attributable to the location of the facility that affect adjoining properties, including, but not limited to, reduced visibility for commercial signs, restricted access, or interference with utility service.
- (f) "Roof-mounted facility" means an antenna or series of individual antennas mounted on a flat or pitched roof, mechanical room or penthouse of a building or structure. This facility includes associated equipment.
- (g) "Stealth facility" means a wall, roof, or monopole facility which is disguised as another object or otherwise concealed from view. Examples of stealth facilities include, but are not limited to, trees, synthetic rocks, or architectural elements such as dormers, steeples, and chimneys.
- (h) "Wall-mounted facility" means an antenna or series of individual antennas mounted against the vertical wall of a building or structure. This facility includes associated

equipment.

(i) "Wireless telecommunications facility" means an unmanned structure which consists of equipment used primarily for the transmission, reception or transfer of voice or data through radio-wave or wireless transmissions. Such sites typically require the construction of transmission support structures to which antenna equipment is attached. (Ord.2005-30, 11/22/05)

28-3. Applicability.

- (1) The requirements of this chapter apply to both commercial and private wireless telecommunications services such as "cellular" or "PCS" (personal communications services) communications and paging systems. This chapter does not pertain to commercial 2 way radios that are not open to use by the public, public safety radio, amateur radio (ham radio), or citizen band radio facilities. All "cellular" or "PCS" facilities shall comply with the following regulations of this chapter and all other ordinances of the county and any pertinent regulations of the Federal Communications Commission and the Federal Aviation Administration.
- (2) All sites and facilities for commercial and private wireless telecommunications services are a conditional use in any zone. (Ord.2005-30, 11/22/05)

28-4. Site location master plan.

- (1) (a) Each person or company desiring to locate wireless telecommunication facilities or other telecommunications facilities within the unincorporated areas of Tooele County shall submit a site location master plan to the planning commission. The site location master plan shall be submitted and accepted by the planning commission prior to any application for a permit for wireless telecommunication facilities or other telecommunications facilities.
- (b) Applications to locate wireless telecommunication facilities may be considered by the planning commission prior to submission of a site location master plan, on condition that the plan is submitted within 120 days following the date of application. If the site location master plan is not submitted within 120 days, any approvals granted shall be automatically revoked and all operations of facilities granted permission under this condition shall cease. Tooele County, its employees and agents shall be held harmless for costs incurred and loss of revenue if an order is issued to discontinue service for failure of applicant/operator to submit the site location master plan within the 120 days. The planning

- commission may grant one extension to the 120day period, provided the extension does not exceed 60 days.
- (2) Each site location master plan shall identify existing locations of facilities and approximate proposed locations of new facilities. The plan shall indicate area coverage, if known, location, antenna height above existing grade, and antenna type for each site and be updated upon request from the planning commission. The existing facilities identified in the plan shall be updated at least annually, and no permit for new wireless telecommunication facilities shall be allowed unless the plan has been updated at least once during the 12 months preceding the permit application date. The applicant shall provide Tooele County with the current name and address of the facility owner and an emergency telephone number for each wireless telecommunication facility.
- (3) The site location master plan shall include a reasonable estimate of the number and general location of facilities necessary to provide service within the unincorporated areas of Tooele County for the ten years following the date the plan is originally submitted. These estimates shall be based on projected population growth and anticipated development. The estimates required by this chapter do not need to be updated on an annual basis, but should be updated at least every five years. (Ord.2005-30, 11/22/05)

28-5. Facility types and standards.

- (1) Wireless telecommunications facilities are characterized by the type and location of the antenna structure. There are four general types of antenna structures: wall-mounted; roof-mounted; monopoles; and lattice towers. Standards for the installation of each type of antenna are as follows:
- (a) Wall-mounted Antenna. The following provisions apply to wall-mounted antennas:
- (i) Wall-mounted antennas shall not extend above the wall line of the building or structure or extend more than four feet horizontally from the face of the building or structure.
- (ii) Antennas, equipment and the supporting structure shall be painted to match the color of the building or structure or the background against which they are most commonly seen. Antennas and the supporting structures on buildings should be architecturally compatible with the building.
- (iii) Antennas mounted directly on existing parapet walls, penthouses, or mechanical equipment rooms, with no portion of

the antenna extending above the roof-line of such structures, shall be considered a wall-mounted antenna.

- (iv) Wall-mounted antennas shall be located not lower than 30 feet from the ground level of the wall on which the antenna is located.
- (v) The total area for wall-mounted antennas and supporting structures combined shall not exceed a total of 100 square feet on each exterior wall of the building. The total area shall be the sum of the areas of all antennas and support structures located on that wall. The antenna area shall be determined as the area of each individual antenna face and the visible portion of the supporting structure as viewed looking directly at the wall.
- (vi) A maximum of three carriers may located antennas on one building wall. For each additional carrier a separate conditional use permit must be obtained.
- (vii) No permit to install a wall-mounted antenna shall be issued unless the owner of the building grants written permission to install the antenna.
- (viii) Non-stealth wall-mounted antennas may not be installed on a building wall or walls facing a public street or on a wall or walls constituting the building's front or main entrance.
- (ix) Stealth wall-mounted antennas are encouraged and shall be allowed to vary from the provisions of this section as determined by the planning commission. Stealth wall-mounted antennas are not required to be located with public or quasi-public uses in Multiple Use (MU), Agricultural (A), Commercial (C), and Manufacturing (m) zones.
- (b) Roof-mounted Antenna. The following provisions apply to roof-mounted antennas:
- (i) Roof-mounted antennas shall be allowed on top of existing penthouses or mechanical equipment rooms providing the antennas and antenna mounting structures shall not extend more than eight feet above the existing roof-line of the penthouse or mechanical equipment room.
- (ii) For antennas not mounted on a penthouse or mechanical equipment room and on a flat roof:
- (a) Setback. The antennas shall be mounted at least five feet from the exterior wall or parapet wall of a building or structure.
- (b) Height. The height shall be measured from the top of the

- antenna to the roof-line of the building or structure, or to the top of the parapet wall if a parapet wall exists. For antennas mounted between five and 14 feet from the exterior wall or parapet wall, the maximum height of the antenna is set back from the exterior wall or parapet wall. For antennas setback more than 14 feet, the maximum height shall be 14 feet.
- (iii) Roof-mounted antennas on a pitched roof shall be allowed provided the antennas and antenna support structures do not extend higher than the peak of the roof measured by a horizontal line from the peak extending over the roof.
- (iv) Antennas not mounted on a penthouse or mechanical equipment room shall be mounted at least five feet from the exterior wall of a building.
- (v) For antennas mounted between five and ten feet from the exterior wall, the maximum height of a roof-mounted antenna is equal to the distance the antenna is set back from the exterior wall up to a maximum height of ten feet above the roof-line of the building to which the antenna is attached.
- (vi) Antennas shall be mounted at least five feet behind any parapet wall. For antennas mounted between five and ten feet behind a parapet wall, the maximum height of the antenna is equal to the distance the antenna is set back from the wall up to a maximum of ten feet as measured from the top of the parapet wall.
- (vii) Roof-mounted antennas shall be constructed and/or colored to match the surroundings in which they are located.
- (viii) No permit to install a roofmounted antenna shall be issued unless the owner of the building grants written permission to install the antennas.
- (ix) Non-stealth roof-mounted antennas shall not exceed a total of eight carriers for a single building's roof, including penthouses or mechanical rooms.
- (x) Stealth roof-mounted antennas are encouraged and shall be allowed to vary from the provisions of this section as determined by the planning commission. Stealth roof-mounted antennas are not required to be located with public or quasi-public used in all Multiple Use (MU), Agricultural (A), Commercial (C), and Manufacturing (m) zones.
- (c) Monopole. The following provisions apply to monopoles:
- (i) The height limit for monopoles is 60 feet in all Rural Residential (RR), Residential (R-1) and Residential Multifamily (RM) zones,

except the planning commission may allow a monopole up to 120 feet in the Multiple use (MU), Agriculture (A), Commercial (C), and Manufacturing (M) zones if it finds:

(a) that the monopole will blend in with surrounding structures, poles, or trees and is compatible with surrounding uses,

(b) the monopole will be available for co-location with other wireless telecommunications facilities, and

- (c) the monopole will be set back at least 300 feet from any residential zone boundary. The height shall be measured from the top of the structure including antennas, to the original grade directly adjacent to the monopole.
- (ii) In all Rural Residential (RR), Residential (R-1) and Residential Multifamily (RM) zones, monopoles will only be allowed in conjunction with an existing public or quasi-public use. Such uses include but are not limited to churches, schools, utilities, and parks.
- (iii) No monopoles shall be allowed in the front yard setback of any lot.
- (iv) Monopole towers shall only be located in the rear yard of a lot.
- (v) Monopole towers shall only be located in the rear yard of a lot.
- (vi) Monopoles shall be set back from any residential structure a distance equal to its height plus ten feet.
- (vii) No permit to install a monopole facility shall be issued unless the owner of the property grants written permission to install the facility.
- (viii) Stealth monopole facilities are encouraged and shall be allowed to vary from the provisions of this section as determined by the planning commission. Stealth monopoles are not required to be located with public or quasi-public uses in Multiple use (MU) and Agricultural (A) zones.
- (d) Lattice Tower. The following provisions apply to lattice towers:
- (i) The planning commission may permit a height limit for lattice towers up to 300 feet in the Multiple use (MU), Agriculture (A), Commercial (C), and Manufacturing (M) zones if it finds:
- (a) that the lattice tower will blend in with surrounding structures, poles, or trees and is compatible with surrounding uses,
- (b) the lattice tower will be available for co-location with other wireless telecommunications facilities, and
 - (c) the lattice tower will be

- set back at least 500 feet from any residential zone boundary. The height shall be measured from the top of the structure including antennas, to the original grade directly adjacent to the lattice tower.
- (ii) Lattice towers are prohibited in all Rural Residential (RR), Residential (R-1) and Residential Multifamily (RM) zones.
- (iii) No lattice tower shall be allowed in the front yard setback of any lot.
- (iv) Lattice towers shall be set back from any residential structure a distance equal to its height plus ten feet.
- (v) No permit to install a lattice tower facility shall issued unless the owner of the property grants written permission to install the facility.
- (vi) Stealth lattice tower facilities are encouraged and shall be allowed to vary from the provisions of this section as determined by the planning commission.
- (2) Free-standing wireless telecommunications facilities shall be surrounded by a fence that is at least six feet high and constructed out of a material appropriate to the location of the facility, as approved by the Tooele County Department of Engineering. Antennas that are roof or wall-mounted shall be secured from access in a manner appropriate to the location.
- (3) Climbing pegs shall be removed from the lower 20 feet of all communications towers.
- (4) All wireless telecommunication facilities shall comply with applicable laws, regulations, and approvals regarding aircraft and airport operations.
- (5) No application for a building permit to construct or install a facility, and no application for a conditional use permit for a wireless telecommunication facility, shall be processed unless the applicant provides proof of each proposed carrier's current license from the Federal Communications Commission to operate as a telecommunications carrier.
- (6) No wireless telecommunication facilities shall overhang, encroach upon, or block a public right-of-way or public sidewalk. (Ord.2005-30, 11/22/05)

28-6. Collocation of antennas.

- (1) It is the policy of Tooele County that location of two or more antennas on a single wireless telecommunication facility should be encouraged as the primary option for applicants, rather than installation of single use wireless telecommunication facilities.
 - (2) Collocation of an antenna on an existing

wireless telecommunication facility shall be addressed as part of the conditional use permit application. The applicant shall also submit proof of each proposed carrier's current license from the Federal Communications Commission to operate as a telecommunications carrier.

- (3) All applications for new wireless telecommunication facilities submitted after the effective date of this chapter shall be for facilities designed and constructed to be of sufficient size and capacity to accommodate two or more antennas, unless otherwise approved by the planning commission for conditional uses. Conditional use approval may include a condition that the applicant allows collocation for other personal wireless providers on such terms as are common in the industry.
- (4) Each applicant shall make a good faith effort to seek collocation on existing antenna structures. All applications for new wireless telecommunication facilities submitted after the effective date of this chapter shall provide the reason or reasons why collocation on an existing structure is not feasible.
- (5) (a) An application for a conditional use permit to construct a wireless telecommunication facility with a single antenna shall not be approved by the planning commission, unless the applicant presents evidence showing that collocation is not feasible, or that the applicant undertook reasonable efforts seeking collocation.
- (b) A wireless telecommunication facility capable of supporting two or more antennas may be approved with a single antenna, provided the applicant shows that there is a reasonable likelihood that other antennas will be located on that facility in the future. (Ord.2005-30, 11/22/05)

28-7. Location on residential lots prohibited. No wireless telecommunication facility may be located on a lot upon which a residential structure is located, notwithstanding the zoning designation for the lot. (Ord.2005-30, 11/22/05)

28-8. Color.

Monopoles, lattice towers, antennas, and any associated buildings or equipment shall be painted to blend with the surroundings which they are most commonly seen. The color shall be determined on a case-by-case basis by the planning commission. after the Within six months wireless telecommunication facilities have been constructed, the planning commission may require the color be changed if it is determined that the color does not blend with the surroundings. (Ord.2005-30, 11/22/05)

- 28-9. Sites in foothills and canyons.
- (1) Any grading for wireless telecommunication facilities, including access roads and trenching for utilities, shall comply with the Uniform Building Code. Wireless telecommunication facilities in the foothills and canyons shall utilize the natural grade, vegetation and existing utilities. Disturbance of the natural environment shall be minimized.
- (2) A computer-generated visual simulation of the proposed structures is required for all sites in the foothills and canyons. The simulation shall show all structures including but not limited to monopoles, lattice towers, antennas, and equipment buildings.
- (3) Disturbance of the visual environment shall be minimized. Site placement and color should be carefully considered to blend in with the surroundings.
- (4) Continuous outside lighting is prohibited unless required by the Federal Aviation Administration for the monopole. (Ord.2005-30, 11/22/05)

28-10. Interference with other communications.

- (1) No permit to construct a wireless telecommunication facility shall be approved if the operation of the facility will interfere with emergency or airport communications.
- (2) Wireless telecommunication facilities shall be located and shall operate in such a manner as to minimize or eliminate interference with communications other than emergency or airport. Such communications include commercial, private, amateur and governmental communications. (Ord.2005-30, 11/22/05)

28-11. Notice to neighboring jurisdictions.

In order to promote efficient delivery of low-power radio communications service and to avoid duplication or overlap of service, applicants shall inform the planning and zoning departments of neighboring jurisdictions when a proposed wireless telecommunication facility is intended to provide service in the neighboring jurisdiction's boundaries. For the purposes of this chapter, "neighboring jurisdictions" means municipal or county units whose boundaries are contiguous to the County. (Ord.2005-30, 11/22/05)

28-12. Additional requirements.

- (1) The following shall be considered by the planning commission for telecommunication sites:
- (a) compatibility of the proposed structure with the height and mass of existing

buildings and utility structures;

- (b) locating the antenna on other existing structures in the same vicinity such as other monopoles, lattice towers, buildings, water towers, utility poles, athletic field lights, parking lot lights, etc. where possible without significantly impacting antenna transmission or reception;
- (c) whether co-location of the antenna on existing structures in the same vicinity has been sought by the applicant, but installation of a new tower without co-location is necessary to provide service:
- (d) whether the facility creates quantifiable detrimental impacts to adjoining properties:
- (e) location of the antenna in relation to existing vegetation, topography including ridge lines, and buildings to obtain the best visual screening:
- (f) spacing between monopoles and lattice towers which creates detrimental impacts to adjoining properties;
- (g) the impact of the proposed tower on future development in the area, according to the County's general plan; and
- (h) installation of curb, gutter sidewalk, landscaping, and fencing.
- (2) In considering a conditional use application for a communications facility, the planning commission shall not consider evidence that the electromagnetic or microwave radiation used by low-power radio communications services detrimentally affects public health or the environment. The planning commission may, however, consider other valid health and safety concerns raised by the location and operation of the communications facility, such as structural integrity, and electrical safety.
- (3) No conditional use application shall be considered unless the application fee is paid and the following information is provided by the applicant:
- (a) the applicant's and property owner's name, address, and telephone number, as well as an emergency telephone number;
- (b) a written statement signed by all owners of the property where the facility is proposed to be located, stating that the owners have reviewed the plans for the proposed facility, understand the type of facility that is being installed and the obligations the owners are undertaking, and granting permission for the applicant to install and maintain the facility;
- (c) the site location master plan, as required by this chapter;
 - (d) a site-specific plan showing in

- reasonable detail the location of the proposed facility, required fencing and landscaping, and the design plans for the proposed facility;
- (e) certification from the Federal Communications Commission and the Federal Aviation Administration, if necessary, that the proposed facility meets all applicable laws and regulations;
- (f) a permit from the Army Corps of Engineers if the facility will affect wetlands;
- (g) statements, when appropriate, from the owners of underground utility facilities, such as water, electrical, or natural gas delivers, that the installation of the facility will not directly interfere with the operation of the utility; and
- (h) notice to neighboring jurisdictions, as required by this chapter.
- (4) The planning commission may require landscaping or other screening to mitigate the visual impact of a proposed communications facility.
- (5) The planning commission may reduce the required setback from a residential zone if practical difficulties are demonstrated by the applicant, such as public park location or public building. (Ord.2005-30, 11/22/05)

28-13. Accessory buildings.

Accessory buildings to antenna structures must comply with the required setback, height and landscaping requirements of the zoning district in which they are located. All utility lines on the lot leading to the accessory building and antenna structure shall be underground. (Ord.2005-30, 11/22/05)

28-14. Non-maintained or abandoned facilities.

The zoning administrator may require each nonabandoned maintained or wireless telecommunication facility to be removed from the building or premise when such a facility has not been repaired or put into use by the owner or agent within 90 calendar days after notice of nonmaintenance or abandonment is given to the owner or agent. The applicant shall post a sitespecific bond when a permit is issued to guarantee removal of the facility and site restoration. The type of bond and amount shall be determined upon review by county staff. No bond shall be required for roof or wall-mounted facilities. (Ord.2005-30, 11/22/05)

28-15. Building permit required.

A building permit from the Tooele County Department of Engineering is required for all wireless telecommunication facilities.