Chapter 16.17: Wireless Communications

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Adopted by City Council on December 10, 2008
Chapter 16.17: Wireless Communication Facilities

16.17.010 INTRODUCTION

A. Wireless Communication Facilities (WCFs)

This Chapter provides the standards and regulations for Wireless Communication Facilities (WCFs), including antennas and all the structures associated with the receiving or capturing of incoming and/or transmitting outgoing communications transmitted from, or to be received by, other antennas. Wireless Communications Facilities will often be referred to as “WCFs” and/or “facilities” within this Chapter.

B. Antennas to which this Chapter has No Application

The provisions of this chapter do not apply to radio or television reception antennas, satellite or microwave parabolic antennas not used by wireless communications service providers, to any antenna support structure or antenna lawfully in existence within the City on the effective date of this chapter, receiving antennas for Direct Broadcast Service (DBS) thirty-nine inches or less in diameter, or commercial radio or television broadcasting facilities.

16.17.020 PURPOSE

The purposes of this Chapter include the following:

A. To establish standards that regulate the placement, appearance and impact of wireless communication facilities (WCFs), while providing residents with the ability to access and adequately utilize the services that these facilities support. Because of the physical characteristics of wireless communication facilities, the impact imposed by these facilities may affect not only the neighboring residents, but the community as a whole. The standards are intended to ensure that the visual and aesthetic impacts of wireless communication facilities are mitigated to the greatest extent possible, especially in or near sensitive areas and environments, including residential areas.

B. To minimize potential adverse health, safety, public welfare, or visual impacts of WCFs, through careful design, siting, construction, landscaping, and innovative visual compatibility techniques.

C. To encourage shared use/co-location of WCFs as a primary option rather than construction of additional single-use towers.

D. To encourage utilization of technology and business practices that will either eliminate or reduce the need for construction of new tower facilities.

E. To protect the health, safety, public welfare, and property of the community, by ensuring that WCFs are sound and carefully designed, constructed, modified, maintained, and removed when no longer used or are determined to be structurally unsound.
F. To protect the public interest and existing public and private investment in infrastructure for Wireless Communications services. For example, the introduction of new non-regulated WCFs may not adversely affect (e.g., interfere with signal transmitted by) a previously existing use.

G. To promote investment in new WCFs and technology that will benefit local end users (consumers) of Wireless Communications services.

**16.17.030 TECHNICAL DEFINITIONS AND TERMINOLOGY FOR WIRELESS COMMUNICATIONS**

A. **Antenna**

“Antenna” for Wireless Communications means a specific device used to receive or capture incoming and/or to transmit outgoing communications transmitted from, or to be received by, other antennas. Antennas regulated by this chapter include omni-directional (or “whip”) antennas, directional (or “panel”) antennas, parabolic (or “dish”) antennas, and any other devices designed for the reception and/or transmission of radio-frequency (RF) signals or other communication technologies, except as otherwise limited in this Chapter.

B. **Attached Wireless Communications Facility**

“Attached Wireless Communications Facility” means a wireless communications facility that is affixed to an existing structure, other than a Wireless Communications Tower.

C. **Co-Location**

“Co-Location” means a wireless communications facility comprised of a single communications tower or building supporting one or more antennas, dishes, or similar devices owned or used by more than one provider.

D. **Lattice Tower**

“Lattice Tower” means a support structure constructed of vertical metal struts and cross braces forming a triangular or square structure which often tapers from the foundation to the top.

E. **Monopole**

“Monopole” means a support structure constructed of a single, self-supporting hollow tube securely anchored to a foundation.

F. **Provider**

“Provider” means a company, which may or may not hold a Federal Communications Commission (FCC) license, that is in business to provide wireless communications services.

G. **Wireless Communications**

“Wireless Communications” means the transmission, via radio frequency electromagnetic waves, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.
H. Wireless Communications Accessory Structure/Equipment

“Wireless Communications Accessory Structure/Equipment” means equipment shelters or radio equipment necessary for the operation of wireless communications in addition to the antenna and tower.

I. Wireless Communications Facility (WCF)

“Wireless Communications Facility (WCF)” means a facility consisting of the equipment and structures involved in receiving and or transmitting communications or radio signals.

J. Wireless Communications Equipment Shelter

“Wireless Communications Equipment Shelter” means the structure in which the electronic radio equipment, electronic equipment, relay equipment and other supporting equipment for a wireless communications facility is housed.

K. Wireless Communications Tower (WCT) / Support Facility

“Wireless Communications Tower (WCT)"/"Support Facility means a structure intended to support equipment used to transmit and/or receive communications signals including monopoles, guyed and lattice towers, but not excluding any other approved structure.

L. Visual Compatibility Characteristics

“Visual Compatibility Characteristics” means characteristics that minimize the visual impact of a tower or antennas.
### 16.17.040 REVIEW PROCEDURES: USE PERMITS AND REVIEW PROCESSES

As noted in Table 16.17.040-1, Wireless Communications Facilities are permitted by a variety of Use Permits and Review Processes, depending on the type or scope of development activity.

**Table 16.17.040-1:**
Types of Use Permits and Review Process(es) Required for WCFs  
According to Type or Scope of Development Activity

<table>
<thead>
<tr>
<th>Type of Use Permit and Review Process</th>
<th>Type or Scope of Development Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outright Permitted (OP)</strong></td>
<td>• Co-Location on an existing WCF</td>
</tr>
</tbody>
</table>
| **Administrative Review (AR)**       | • Attachment to an existing structure within the parameters of the zone requirements  
                                     | • Modification to existing WCF accessory structure or equipment within the parameters of the zone requirements |
| **Conditional Use (CU)**             | • New WCF  
                                     | • Modification of an existing WCF that exceeds the standards of the zone |
| **Conditional use (CU) and a Variance (VAR)** | • New WCF or Modification of an existing WCF that exceeds the height standard of a zone |

**Notes:**
- Height standards for zones can be found in Chapters 16.05 – 16.10.
- The maximum permissible height (even through the variance process) is 150 feet for a WCF in any zone.
- In the Industrial Zone (Z-IND), the maximum permissible height for a WCF is 150 feet, and does not require a variance.
- Use Permits: Wireless Communications Facilities shall be permitted as per the requirements of the “Other Land Use” Tables in the Land Use Chapters (16.05 – 16.10): Tables 16.05-5, 16.06-5, 16.07-5, 16.08-5, 16.09-5, 16.10-5.

**Review Processes**

1. **Outright Permitted Uses with Site Review and Building Permit:** “OP” means the use is permitted outright and a Building Permit is issued after a site review determines that all setbacks and other lot and building site requirements are satisfied.
2. **Permitted with Administrative Review:** “AR” means the use is permitted through an Administrative Review process that takes into account all applicable requirements (see Chapter 16.20).
3. **Permitted with Conditional Use Approval:** “CU” means the use is permitted with a Conditional Use approval (Chapter 21).
4. **Site Reviews:** The processing of a variety of land use applications may also include detailed site reviews. These requirements are addressed in LDC Chapters 16.20 – 16.23 (Article Four).
16.17.050 SITING PREFERENCES

WCFs shall be sited in accordance with the following priorities, in order of their preference. If the applicant proposes a facility of lower priority, the applicant shall demonstrate that each of the higher priorities has been considered and found to be not feasible.

A. Priority #1: Co-location on an existing WCF.

B. Priority #2: Use of an Attached WCF.

C. Priority #3: Siting of a new Wireless Communications Tower (WCT), in a visually obscure location, using design techniques maximizing “Visual Compatibility Characteristics.”

D. Priority #4: Siting of a new WCT in a visually prominent location (e.g., along arterials and collectors, on hills and ridges), using design techniques maximizing “Visual Compatibility Characteristics.”

E. Priority #5: Siting of a tower in a visually prominent location (e.g., along arterials and collectors, on hills and ridges), not employing design techniques maximizing “Visual Compatibility Characteristics.”

F. Exemptions: Wireless communications facilities for emergency services (police, fire, and emergency management) are exempt from the above requirements if the siting agency can demonstrate the need for an exemption based on public safety and welfare issues. The review authority may also exempt local, state, and federal facilities, as well as facilities owned and operated by federally-licensed amateur radio station operators (i.e., “ham” radio operations).

16.17.060 STANDARDS AND REQUIREMENTS

A. Code Compliance Requirements: All WCFs shall meet all requirements established by the provisions of this Code, the LMC, and other applicable City codes, and other applicable standards.

B. State and Federal Requirements: All WCFs shall comply with all applicable federal (e.g., Federal Communication Commission and Federal Aviation Administration) and state standards.

C. Height:

1. A WCF may not exceed the height standards of a zone, except where permitted through the variance process.

2. Except in the Industrial Zone (Z-Ind), the maximum permissible height (even through the variance process) is 150 feet for a WCF in any zone.

3. In the Industrial Zone (Z-IND), the maximum permissible height for a WCF is 150 feet, and does not require a variance.

4. The Height of a WCF shall be measured as per building code standard procedures from the center of the base of the proposed facility to the topmost portion of the WCF (e.g., the tip of the highest antenna or other transmission or reception device).

5. Airport Overlay Zones: All lands within the airport overlay zones (e.g., Approach Surface, Transitional Zone) shall be subject to additional height restrictions and development standards (see Chapter 16.12).
D. Co-Location:

1. New WCFs, if technically feasible, will be designed and constructed for at least three antennas/providers to co-locate on the facility and to allow antennas mounted at varying heights. At a minimum, WCFs up to 120 ft in height shall accommodate at least two facilities/providers.

2. A facility may be attached to any existing structure as long as the height of that structure is not increased by more than 10’ and so long as it meets all relevant requirements of this Chapter, consistent with applicable Building Codes.

3. A freestanding WCF shall be approved only if the applicant demonstrates that it is not feasible to site the facility on an existing structure. The application shall contain documentation that alternative sites within a radius of least 2,000 ft have been considered and are technologically unfeasible or unavailable. The application also must document why co-location is impractical on existing structures for one or more of the following reasons: structural support limitations; safety considerations; lack of available space; failure to meet service coverage area needs; or unreasonable economic constraints.

E. Construction:

1. All facilities must meet the requirements of the Uniform Building Code (UBC), the International Building Code (IBC) and/or the Oregon Structural Specialty Code, and all other relevant and applicable building codes.

2. Noise-generating equipment shall be sound-buffered by means of baffling, barriers or other suitable means to reduce the sound level measured at the property line to no more than 30 dBA above the level of ambient background noise when adjacent to residential uses and 45 dBA above the level of ambient background noise in other areas.

3. It is prohibited to attach any communications facility or portion thereof to a tree.

4. WCFs shall be set back at least twenty-five percent (25%) of the tower height from all property lines or shall meet the setbacks of the underlying zone, which ever is greater.

F. Design: Where possible new facilities will be located in such a manner that they blend in with the background around them, using techniques to ensure visual compatibility characteristics.

1. All new WCF towers shall be a monopole or lattice tower structure constructed out of metal or other nonflammable material. The height and mass of the structure shall not exceed that which is essential for its intended use and public safety.

2. All accessory structures (i.e., vaults, equipment rooms, utilities, and equipment enclosures) shall be concealed, buffered or screened with mature vegetation and/or sight obscuring fencing (see Chapter 16.15), shall be consistent with the underlying zone, or may be placed underground. Underground placement of equipment shelters is encouraged and should be considered in each case.

3. WCFs shall be painted in a non-reflective color to match the existing or attached structure and/or to blend into the surrounding environment to the greatest extent possible as seen from abutting uses, roadways or other public ways. Alternative colors or treatments of the external surfaces of any and all components of a WCF may be approved by the Review Authority to minimize the visual impact of the facilities, and such approved alternatives shall become part of the conditions of approval.
G. Landscaping/Screening: All ground-level facilities associated with a WCF shall be landscaped and/or screened in accordance with the provisions of Chapter 16.15 of this Code. The facilities must be fully screened before operations can begin.

H. Lighting: No lighting shall be permitted on a WCF except as required for security and as required by the Federal Aviation Administration. (See Section 16.19.050, Exterior Lighting, in Chapter 16.19.)

I. Location: No communications facility shall be installed on an exposed ridge line unless it blends with the surrounding existing natural and man-made environment in such a manner as to be visually compatible with the environment.

J. Signs: Signs shall comply with the requirements set forth in this Code.

K. Twenty-four Hour Emergency Contact Information: As part of the submittal requirements, all owners of WCFs shall provide 24 hour contact information to the City so as to facilitate emergency response. Such information must be kept current and on file with the City (Police Chief) and the Lebanon Fire District.

L. Facilities on City-owned property: When a proposed WCF would be sited on property owned by the City of Lebanon, the City shall exercise its zoning authority under this Code independently from and without regard to the terms and conditions of any agreement allowing the facility.
16.17.070 ATTACHED COMMUNICATIONS FACILITIES

All attached facilities shall be located and designed to appear an integral part of the structure.

A. Roof mounted antennas and all building mounted accessory equipment shall be located no closer to the nearest edge of the roof than the height of the antenna or accessory equipment, whichever is greater.

B. Wall mounted antennas shall be architecturally integrated into the building.

C. Wall mounted antennas shall protrude no more than four feet (4') from the face of the wall.

D. Accessory structures for attached facilities, such as equipment shelters, cabinets or other enclosed structures containing electronic equipment, shall be camouflaged or otherwise constructed using visual compatibility techniques, as defined in this Chapter to the greatest extent possible.

E. All proposals shall demonstrate adequate structural strength to support the additional weight and stress of a proposed antenna attachment in compliance with all applicable building code provisions.

16.17.080 ABANDONMENT OF FACILITIES

A. When a WCF ceases to operate, the owner or service provider shall provide notice to the City within thirty (30) days. Failure to notify the City within 30 days, may result in removal of such a facility 90 days following the cessation of operations or thereafter.

B. An antenna support structure that has not had an antenna or antenna array mounted upon it for a period of 170 successive days, or if the antenna or antenna array mounted thereon are not operated for a period of 170 successive days, shall be considered abandoned, and the owner thereof shall remove such structure and any accompanying equipment enclosure to a depth of four feet below the surface of the ground within 90 days from the date of written notice from the City. During this 90-day period, the owner may apply, and, for good reason, be granted an extension of time on such terms as the City Planner or Building Official shall determine.

C. If such structure and equipment enclosure are not so removed, the City may seek and obtain a court order directing such removal and imposing a lien upon the real property upon which the structure(s) are situated in an amount equal to the City's cost of removal.

D. The City may also declare such an abandoned facility a nuisance and pursue enforcement and all available remedies under the appropriate provisions of the LMC (see Chapter 16.08).
16.17.090 APPLICATION

A. Application Requirements

The applicable submittal requirements for the type of land use review process that is necessitated by the specific proposal submitted, and the requirements of the zone of the subject property, apply to applications for the siting of communications facilities.

B. Development Plan Required

All applications shall be accompanied by a Development Plan drawn to scale showing the following:

1. Use or uses,
2. Location of the proposed facility and relevant dimensions.
3. Height of the proposed facility
4. Setbacks for the proposed facility.
5. A photo simulation of the proposed WCF for the maximum number of providers.
6. Dimensions and location of areas to be reserved for vehicular and pedestrian access and circulation.
7. A landscaping plan that indicates how the facility will be screened from adjoining uses.
8. A fencing plan that indicates the location, height and design of any proposed fencing.
9. A lighting plan that indicates the type and location of any proposed lighting.
10. A sign plan that indicates the size, location, and design of any proposed signage.
11. Drawings demonstrating the materials, color and design of the proposed facility.
12. A map showing all existing wireless communication facility sites operated by the provider within two miles of the Lebanon boundary, or the top of the nearby ridges, whichever is greater, including a description of the facility at each location.
13. A propagation study indictment proposed facility and the adjacent hand-off sites.
14. If provider proposes to construct a new facility (tower), the application shall include findings that demonstrate that it is not legally or technically feasible to co-locate.

C. Additional Documentation

1. Documentation of the efforts that have been made to co-locate on existing or previously approved towers, as required by the siting standards in Section 16.17.060 above.
2. Each provider shall make a good faith effort to contact the owner(s) of all existing or approved towers and shall provide a list of all owners contacted in the area, including the date, form of contact and the result of contact.
3. Documentation as to why co-locating on an existing or proposed tower or attachment to existing structures within 2000 feet of the proposed site is not feasible.
D. Narrative Required

A written statement shall include the following information:

1. The name and contact information for the provider;

2. Twenty-four Hour Emergency Contact Information (during construction, and after the WCF becomes operational) to facilitate emergency response

3. A description of the character of the proposed facility;

4. Analysis of how the application meets the review criteria;

5. Applicants/providers shall provide evidence of legal access to the proposed WCF.

6. The applicant/provider shall provide evidence that legal access to the facility site will be maintained for the duration of the facility's operation.

7. Where a proposed WCF is located on a property not owned by the provider, the applicant/provider shall present documentation that the owner of the property has granted an easement or entered into a lease or other authorization for the proposed facility and that vehicular access is provided to the facility.

8. For new free standing towers, the applicant shall provide evidence that describes the WCF’s structural capacity to carry the antennas of at least three Wireless Communications providers.

9. The applicant shall provide evidence of steps the provider will take to avoid interference with normal radio and television reception in the surrounding area, with other communications service providers’ signals, and communications of any public safety agency or organization, per FCC requirements.

10. The applicant shall demonstrate that the WCF will provide service within the City.

11. If the applicant/provider proposes a new tower or co-located facility, the applicant shall provide evidence that the facility’s height is the lowest height at which the gap in coverage can be filled.

12. All applications shall include evidence that at least one provider will use the proposed facility to provide wireless communications service to City residents immediately upon construction completion of the facility.

13. All applications shall include a statement recognizing the Grounds for Denial of Permits and Removal of Facilities listed below:

   a. Applications shall include a written agreement that Wireless Communications Facilities owned by the provider, that do not have operating antennas for a period of six (6) months, shall be considered abandoned and shall be removed by the operator within 60 days thereafter.

   b. Applications shall include a written agreement from the property owner that if the provider fails to remove an abandoned WCF, the property owner has full legal and fiscal responsibility for the WCF removal.