

UTL – 3.08 UTILITY FRANCHISE MANAGEMENT – Wireless Communications Facilities (Macro Sites) in the Public Right of Way

- A. **Purpose.** On September 27, 2018, the Federal Communications Commission released a Declaratory Ruling and Third Report and Order that impacts local management of wireless infrastructure in the right of way. Aesthetic requirements for wireless infrastructure must be published by at least April 15, 2019. This rule codifies previously existing objective aesthetic standards and procedures for wireless applications in the right of way which were outlined in each wireless carrier’s franchise agreement and ensures that the standards and procedures will be applied uniformly to all applicants.
- B. This rule applies to proposals for wireless communications facilities defined as macro sites that are located in the public right of way.
- C. The City adopts these administrative rules pursuant to rule-making authority under Portland City Code 3.114.050(3).
- D. **Definitions.**
- a. Applicant means any wireless carrier who has been granted authority to operate in the public right of way by the City under a current, valid right of way agreement or other similar form of authority.
 - b. Wireless Communications Facility or Facility means the equipment, and associated structures, needed to transmit and/or receive electromagnetic signals. A Wireless Communications Facility typically includes antennas, supporting structures, enclosures and/or cabinets housing associated equipment or cable and may be attached to utility or City-owned structures or poles in the public right of way. Wireless Communications Facilities also include strand-mounted devices and associated equipment. Wireless Communications Facilities does not include equipment installed for City purposes, including but not limited to air quality sensors or earthquake sensors.
 - c. Guy Pole or Support pole means a pole that is used primarily to structurally support an electrical or telephone distribution or transmission pole, but has no energized conductors or telephone wires or Facilities attached.
 - d. Macro Wireless Facility or Macro Site means, for the purposes of this administrative rule, any wireless communications facility that is not a Small Wireless Facility as defined in TRN-10.44 – Vertical Infrastructure in the Public Right of Way, *Interim*. (<https://www.portlandoregon.gov/transportation/78507>)
 - e. Small Wireless Facility or Small Cell (SWF) means a facility that is defined in TRN-10.44 – Vertical Infrastructure in the Public Right of Way, *Interim*. (<https://www.portlandoregon.gov/transportation/78507>)

- f. **Structure** means any utility pole, Guy or Support pole, utility pole extension, light standard or other similar pole in the streets that is suitable for the installation of Facilities. An “Original Structure” is a pole or other similar facility that has not been constructed, replaced or improved to accommodate Facilities.
- E. **Small Wireless Facility.** Applicants shall follow TRN-10.44 for all proposed Small Wireless Facilities. (<https://www.portlandoregon.gov/transportation/78507>)
- F. **Macro Sites.** Applicants shall follow UTL – 3.08 for any proposed Macro Site in the public right of way.
- G. **Facility and Structure standards.** This section establishes standards for attaching Facilities to structures in the streets. Unless otherwise specified, all references in this rule to the existing or allowed height of a structure or utility pole are measured from ground level.
 - a. **Structure selection.**
 - i. Applicants shall site Facilities on existing structures before placing them on structures in the streets. Existing structures include but are not limited to buildings, water tanks, and cell towers, as well as utility poles located on City-owned property.
 - ii. All of Portland’s streets are prioritized for siting Facilities on structures. The categories for streets within the City may be identified by referring to the City’s official map of Wireless Street Priorities. Applicant must use poles in the following order of priority:
 1. Priority 1 Streets (generally freeways, highways, and streets in industrial areas), before using poles on
 2. Priority 2 Streets (generally high traffic volume streets), before using poles on
 3. Priority 3 Streets (generally medium traffic volume streets), before using poles on
 4. Priority 4 Streets (generally low traffic volume residential streets).
 - iii. If Applicant selects a structure to support its Facilities on a Priority 4 street, Applicant shall provide RF contour maps (in color) illustrating the calculated coverage using the proposed antennas at the target signal level, plus and minus 5 dB, and the calculated coverage areas for all existing adjacent cell sites, to support the rejection of other structures. If other

structures were ruled out for non-RF coverage reasons, Applicant shall identify and explain those reasons.

- iv. For all structures except those in Priority 1 Streets, Applicant must place antennas and Facilities first on structures that carry high voltage transmission power lines before placing them on any other structure. For the purposes of this rule, “high voltage transmission” means lines with capacity for transmitting electricity of 57,000 volts or greater.

b. **Original Structures.** Facilities may be attached to Original Structures in the streets, provided:

- i. The requirements for structure selection are met;
- ii. Facilities do not jeopardize the physical integrity of the structure;
- iii. Antennas and antenna mounting devices below the top of the structure shall be mounted flush with the structure or on extension arms that are no greater than one (1) foot in length.
- iv. Antennas and antenna mounting devices above the top of the structure:
 1. Mounting devices and antennas other than omni-directional, or “whip” antennas shall be concealed within a canister or unicell-style cylinder, the diameter of which shall be no greater than twelve inches (12”) more than the diameter of the structure as measured six (6) feet from the butt of the structure.
 2. The combined height of the antennas and mounting device on a structure that carries high voltage transmission lines shall not project more than:
 - a. Twenty (20) feet above the structure if the structure is in a Priority 2 or 3 Street;
 - b. Fifteen (15) feet above the structure if the structure is in a Priority 4 Street and less than or equal to fifty (50) feet in height;
 - c. Twenty (20) feet above the structure if the structure is in a Priority 4 Street and more than fifty (50) feet in height;
 - d. The combined height of the antenna and mounting device on structures in Priority 1 Streets is not regulated.
 3. The combined height of the antennas and mounting device on a structure that does not carry high voltage transmission lines shall not project more than:
 - a. Fifteen (15) feet above a structure in a Priority 2 or 3 Street;

- b. Ten (10) feet above a structure in a Priority 4 Street;
 - c. The combined height of the antenna and mounting device on structures in Priority 1 Streets is not regulated.
- v. All Facilities mounted on an Original Structure shall be painted, coated, or given a surface application to conform to the color and surface of the structure. If cabinets require a special heat-reducing paint finish, they must be a neutral color such as beige, off-white, or light gray; and
 - vi. The dimensions of equipment cabinets mounted on poles in Priority 1, 2, and 3 Streets are not regulated. The height plus width plus depth of equipment cabinets mounted on poles in Priority 4 Streets shall be no more than 120 lineal inches combined.
 - vii. The Original Structure is not replaced with a taller structure, except as authorized below in Replacement Structures.
- c. **Replacement Structures.** For purposes of this Section, “Replacement Structure” shall mean a structure that a) replaces an existing structure or Original Structure to accommodate Facilities; and b) does not result in an increase in the total number of utility or guy poles in the streets. Facilities may be attached to Replacement Structures in the streets, provided:
- i. The Replacement Structure is of sufficient integrity to support the Facilities.
 - ii. The Replacement Structure must comply with the requirements of Structure Selection (UTL – 3.08 (G)(a)).
 - iii. Color. Prior to installation, if the Replacement Structure is not made entirely of wood, it shall be painted, coated, or given a surface application to conform to the color of the Original Structure.
 - iv. The dimensions of equipment cabinets mounted on poles in Priority 1, 2, and 3 Streets are not regulated. The height plus width plus depth of equipment cabinets mounted on poles in Priority 4 Streets shall be no more than 120 lineal inches combined.
 - v. For all structures except those in Priority 1 Streets, Applicant shall place antennas and Facilities first on structures that carry high voltage transmission power lines before placing them on any other structure. For the purposes of this subsection, “high voltage transmission” means either power lines with capacity for transmitting electricity of 57,000 volts or greater, or a skipped pole between high voltage transmission power lines. Skipped poles are defined below.

vi. Replacement Height Limits. A structure or Original Structure may be replaced with a Replacement Structure that is taller than the Original Structure. The total combined height of a Replacement Structure and any mounting devices shall be no greater than that allowed in Table 1.

1. Guy poles. Guy poles are shorter than the utility poles they support. On Priority 1, 2, and 3 streets a guy pole may be replaced as if it is the same height as the pole it supports using Table 1, below. On Priority 4 streets a Guy pole can be replaced up to the height of the pole it supports.

Example 1: A 20 foot guy pole that supports a 30 foot utility pole in a Priority 3 Street may be replaced as if it is 30' tall. Therefore, it can be replaced with a pole 45 feet tall (30' + 50% of 30');

Example 2: A 20 foot guy pole that supports a 30 foot utility pole in a Priority 4 Street may be replaced up to a maximum of 30 feet.

2. Skipped poles. There are streets where runs of taller poles (typically high voltage transmission) and shorter poles (typically low voltage distribution or communication) are located on the same side of the street. Where the shorter pole is situated adjacent and between two taller poles in the same run, the shorter pole is known as a “skipped pole.” A skipped pole may be replaced with a pole of the same height as the adjacent taller poles

Example: A 45 foot (45') pole is situated adjacent and between two 65 foot (65') poles on the same side of a Priority 4 Street. The 45' pole can be replaced as if it were 65' using Table 1, below. Therefore, it can be replaced with a pole 80 feet tall (65' + 15'). If the 45' pole is on the opposite side of the Priority 4 Street from the taller poles, it cannot be replaced as if it were 65'; it can only be replaced up to a height of 60 feet (45' + 15').

Table 1

Maximum Combined Additional Height Allowed for Replacement Structures and Antenna Mounting Devices (All figures are in feet over the height of the existing structure measured from ground level)	
Street Type	Additional Height
Priority 1 (freeways, highways, and streets in industrial areas)	80'
Priority 2 (high traffic volumes)	Lesser of 40' or 50% of the height of the pole
Priority 3 (medium traffic volumes)	Lesser of 35' or 50% of the height of the pole

Priority 4 (low traffic volumes; residential streets)	Lesser of 15' or 45% of the height of the pole
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- vii. Antennas above the top of the Replacement Structure and Mounting Device. Antennas shall not project more than three (3) feet above the maximum allowable height of the Replacement Structure and mounting device. Example: A 35 foot pole on a Priority 4 Street may be replaced with a pole and mounting device, the top of which is no more than 50 feet tall, and the measurement to the top of the antennas may be no more than 53 feet.
 - viii. Replacement Structure Engineering. In the event that a structure needs to be replaced to provide structural capacity to support the Facility, an Applicant must provide to the City a written statement from the pole owner that the Replacement Structure is no greater in width than the engineering minimum required by the Oregon Public Utility Commission.
 - ix. Street Trees. If a structure in a Priority 4 street is proposed for replacement, Applicant shall submit the sum of One Thousand Dollars (\$1,000) to the Bureau of Parks to fund street tree planting. Applicant shall consult with the owner of the structure and the Bureau of Parks to determine if a tree could be planted in the parking strip such that a mature tree canopy could develop around the Replacement Structure to reduce the visual impact of the Replacement Structure to the abutting property. If a tree cannot be planted with this result, then the Park Bureau shall deposit the funds into the Tree Damage Fund for its use.
 - x. Applicant shall not locate any Facilities, such as cabinets, at grade within the streets, but may connect its Facilities in the streets to Facilities located on property adjacent to the streets in accordance with applicable City codes and with the permission of the adjacent property owner.
- d. **Notice and Meeting.** Applicant shall follow ULT – 3.07 – Utility Franchise Management Pre-Application Process for Wireless Facilities in Wireless Streets for Macro Sites proposed in or within 400 feet of a Priority 4 Street.