

City of Oregon City**Small Cell Design and Construction Standard Guidelines for Public Rights-of-Way****Intent and Purpose**

The purpose of these standards is to ensure that Small Cell wireless communication facilities within the public rights-of-way are designed and constructed in a manner that protects and preserves the physical capacity and aesthetic value of the public rights-of-way intended use. These guidelines shall provide requirements and permitting processes that allow for reasonable access to the public rights-of-way for Small Cell wireless communications facilities consistent with applicable federal, state, and applicable City ordinances. Oregon City seeks to facilitate and streamline the rollout of Small Cell infrastructure while at the same time safeguard the public rights-of-way and prevent undue hazards to property, the environment, public health, welfare, and safety.

These Standards and Guidelines are for Small Cell deployment in City Rights-of-Way. Oregon City Municipal Code 17.80 – Communication Facilities – outlines the deployment and land use considerations required for communication facilities other than Small Cells within Oregon City ROW. In the future, City staff will initiate amendments to OCMC 17.80.030 to exclude Small Cell Facilities meeting the Design standards established in the Small Cell Design and Construction Standard Guidelines for Public Rights-of-Way. OCMC 17.80.030 shall regulate Small Cell facilities deployed within private property.

Definitions

For purposes of these standards, the following definitions shall control:

“Alternative antenna structure” (monopole) means an existing pole or new proposed structure within the public rights-of-way that can be used to support an antenna and is not a City facility or third-party wood utility pole.

“Antenna” means communications equipment that transmits or receives electromagnetic radio signals used in the provision of any type of wireless communications services.

“Applicant” means any person or entity submitting an application to install Small Cell wireless telecommunication facilities or structures to support the facilities within a public rights-of-way.

“City” means the City of Oregon City, an Oregon municipal corporation, or individuals authorized and designated to act on behalf of the City.

“City Commission” means the elected governing body of the City of Oregon City, Oregon.

“City-owned infrastructure” means infrastructure in the public rights-of-way within the boundaries of the City public rights-of-way and/or public easement, including but not limited to street lights, traffic signals, towers, structures, buildings, and utilities that are owned, operated, and/or maintained by the City.

“Federal Communications Commission (FCC)” means the federal administrative agency, or its lawful successor, authorized to regulate and oversee telecommunication carriers, services, and providers on a national level.

“Landscape screening” means plantings, shrubbery, bushes or other foliage intended to screen the base of a wireless telecommunication facility from public view.

“Licensee” means a telecommunication utility registered with the City pursuant to Oregon City Municipal Code Chapter 13.24 Telecommunication Facilities and Chapter 13.34 Utility Facilities in Public Rights-of-Way.

“Macro-Site telecommunication” means a telecommunication facility designed to support multiple cell sites. Macro-Sites include an array of antennas, transmission equipment, and multiple coax and hybrid cable connections. Oregon City Municipal Code 17.80 Communication Facilities governs the deployment of Macro-Sites.

“Public Rights-of-Way” means and includes the space in, upon, above, along, across, over or under the public streets, roads, highways, lanes, courts, ways, alleys, boulevards, bridges, trails, paths, sidewalks, bicycle lanes, public utility easements, and all other public ways or areas, including the subsurface under and air space over these areas, excluding parks, parkland, municipal elevator or other City property that is not generally open to the public for travel. This definition applies only to the extent of the City’s right, title, interest and authority to grant a license to occupy and use such areas for utility facilities.

“Small Cell wireless telecommunication antenna” means an antenna that is part of a private wireless telecommunications facility.

“Small Cell wireless telecommunication equipment” means equipment, exclusive of an antenna, that is part of a private wireless telecommunications facility.

“Small Cell wireless telecommunication facility” means a Small Cell wireless telecommunications facility consisting of an antenna and related equipment, either installed individually or as part of a network, to provide coverage or enhance capacity in a limited defined area. Generally, it is a single-service provider installation.

“Third party utility pole” means an upright pole designed and used to support electric cables, telephone cables, telecommunication cables, cable service cables, and other utility facilities and/or which is used to provide lighting, traffic control, signage, or a similar function. Third party utility poles specifically constitute Non-City owned infrastructure within the Public Rights-of-Way.

“Usable Space” means all the space on a pole except the portion below ground level, the twenty feet of safety clearance space above ground level, and the safety clearance space between communications and power circuits; there is a rebuttable presumption that six feet of a pole is buried below ground level.

General

Oregon Revised Statutes 221.510 (Municipal Regulation of Telecommunication Carriers) authorizes municipalities to:

- (a) Determine by contract, or prescribe by ordinance or otherwise, the terms and conditions, including payment of privilege tax to the extent authorized by ORS 221.515 and other charges and fees, upon which any telecommunications carrier may be permitted to occupy the streets, highways, or other public property within such municipality and exclude or eject any telecommunications carrier therefrom.
- (b) Require any telecommunications carrier, by ordinance or otherwise, to make such modifications, additions, and extensions to its physical equipment, facilities or plant, or service within such municipality as shall be reasonable or necessary in the interest of the public, and designate the location and nature of all additions and extensions, the time within which they must be completed, and all conditions under which they must be constructed.
- (c) Provide for a penalty for noncompliance with the provisions of any charter provision, ordinance, or resolution adopted by the municipality in furtherance of the powers specified in this subsection.

The City established a Rights-of-way Ordinance 13-1014 in 2013 establishing registration, permitting, usage fees, and general management of the Public Rights-of-Way. Pertinent to the ordinance, Oregon City Municipal Code Chapter 13.24 Telecommunication Facilities and 13.34 Utility Facilities in the Public Rights-of-Way govern all telecommunication provider access to public rights-of-way, and Oregon City Municipal Code 17.80 Communication Facilities governs the deployment of Communication Facilities outside the City rights-of-way. The Small Cell Design and Construction Standard Guidelines are supplemental standards and processes regarding the installation of Small Cell wireless telecommunication equipment within the public rights-of-way. Provisions pertaining to Small Cell installations, in City rights-of-way not expressly stated within these standards, will default to Oregon City Municipal Code 13.24 and 13.34.

Permit Process

Small Cell facilities within the Public Rights-of-Way are reviewed by the City Engineer, or authorized designee, in accordance with the process below:

- **Small Cell Facility Minor Installation Permit** – installations on existing third-party infrastructure-applications shall comply with regulation and documentations/permissions as set forth by federal, state, and City standards. Applications shall clearly denote the below outlined requirements. The review period for applications will be 60 days following reception of completed application.
- **Small Cell Facility Major Installation Permit** – installations on existing City-owned infrastructure or proposed new infrastructure – applications for compliant sizes, locations, and aesthetics with necessary supportive documentation permissions as set forth by Federal, State, and City standards. The review period for applications will be 90 days following reception of completed application.

Application Requirements

Complete Licensee applications for both Small Cell Facility Minor and Small Cell Facility Major Installations shall include the following materials:

1. Aerial vicinity map showing the location of the existing and/or proposed wireless support structure to which the Small Cell facility will be attached.
2. Street view image or photographs showing existing and proposed site conditions including all proposed Small Cell facility infrastructure.
3. Scaled engineered plans or drawings, prepared by a professional engineer licensed in the State of Oregon, showing at a minimum:
 - a. The height of a wireless support: Small Cell Facilities height as defined by the FCC
 - i. The overall height of the wireless support structure and Small Cell facility, including shrouding and concealment.
 - ii. Existing wireless support structure: the increase in height due to the collocated antenna, including shrouding and concealment, height at which all Small Cell wireless telecommunication facility equipment is placed, clearance requirements to other attached utilities denoting each clearance regulated by OJUA and NESC.
 - b. The height from the base of the wireless support structure to the lowest point proposed Small Cell facility equipment to be installed on the structure.

- c. The distance from the outer edge of the wireless support structure parallel to the outer edge of all equipment associated with the Small Cell facility to be installed on the structure.
4. Structural analysis, prepared and stamped by a professional engineer licensed in the State of Oregon, shall include evaluation of the existing and/or proposed wireless support structure and foundation structurally adequate to safely support the proposed Small Cell wireless facilities and comply with NESC for structural stability to determine whether the structure can carry the proposed Small Cell wireless facility and comply with applicable NESC and structural safety code.
5. Engineered plans shall show the right-of-way lines, property lines, proposed utilities (above and below grade), and existing curbs, driveways, sidewalks, streets, paths, buildings, and structures. Any conflicts with existing infrastructure shall be noted, along with a description of how the conflicts will be resolved.
6. Engineered details of proposed Small Cell facilities, including elevations/profiles, plans and sections, clearly indicating the following:
 - a. Height, width, depth, and volume (in cubic feet) of all proposed antenna and exposed elements and/or proposed antenna enclosures.
 - b. Height, width, depth, and volume (in cubic feet) of proposed wireless equipment associated with the facility including electric meters, concealment elements, telecommunications demarcation boxes, grounding equipment, power transfer switches, cut-off switches, and vertical cable runs for the connection of power and other services as applicable.
 - c. Method of installation/connection.
 - d. Color specifications for proposed wireless support structures and associated exposed equipment, cabinets, and concealment elements.
 - e. Electrical plans and wiring diagrams.
 - f. Footing and foundation drawings and structural analysis, sealed and signed by a professional engineer licensed in the State of Oregon.
7. Permission to use utility pole or alternative antenna structure: The operator of a Small Cell wireless telecommunication facility shall submit to the City a copy of the written approval from the owner of an existing utility pole, monopole, or an alternative antenna structure, to mount the Small Cell wireless telecommunication facility on that specific pole, tower, or structure, prior to issuance of the City permit.
8. Manufacturer's specification sheets for proposed Small Cell facility equipment, including wireless support structures, equipment cabinets, shrouds or concealment devices, antennas, meters, radios, switches, telecommunications demarcation boxes, and grounding equipment.
9. For removal of wireless support structures or ground-mounted equipment, an engineered drawing that shows the item(s) being removed and the details of restoration to be completed. Restoration shall be completed in accordance with the applicable City of Oregon City Municipal Code and shall restore the site to pre-construction conditions.
10. Letter stating the Applicant has performed an analysis to verify that the Small Cell facility will not cause any interference with City public safety radios, traffic signal light system, or other communications equipment. It shall be the responsibility of the Operator to evaluate the

compatibility between the existing City infrastructure and the Operator's proposed infrastructure.

11. A traffic control plan, in accordance with the requirements of the *Manual of Uniform Traffic Control Devices*.

Applications shall include all materials as listed. Additionally, the City may require significant analysis of the impacts and/or replacement of Small Cell Major installations. The City reserves the right to deny, when in the public's best interest, the installation of Small Cell facilities attached to City infrastructure. Macro-Sites are not allowed within the City Public Rights-of-Way. The review period for Small Cell Facility Major installation applications will be 90 days following reception of completed application.

Standards

Licensees or other such entities shall obtain applicable City permit(s) and comply with applicable Oregon City Municipal Code.

1. *Number limitation:*
 - a. maximum of one Small Cell wireless facility shall be attached to an alternative antenna structure.
 - b. maximum of one Small Cell wireless antenna shall be installed as part of one Small Cell wireless facility.
2. *Separation and clearance requirements.* A Small Cell wireless telecommunications antenna shall be separated from:
 - a. An existing residential structure by a minimum horizontal distance of the total above-ground height of the pole or structure that the antenna is attached to, and
 - b. Small Cell wireless telecommunication antenna installed and maintained by the same licensee shall be a minimum of 300 horizontal feet apart.
3. *Locations:* The City reserves the right to deny, when in the public's best interest, the deployment of Small Cell wireless telecommunication facilities within the public rights-of-way. Providers shall provide engineered coverage maps showing coverage laps in areas where location priorities, set below, are bypassed. Small Cell installations triggering the bypass of the below priorities will be considered Small Cell Major Installations, and Licensees will be required to provide additional information justifying the need of facilities at proposed locations.

Licensees shall install facilities according to priority sets below:

- a. Street Classification
 1. Expressway
 2. Major Arterial
 3. Minor Arterial
 4. Collector
 5. Local
- b. Support Structure
 1. Third Party Utility Pole
 2. Third Party Street Light

3. City-Owned Infrastructure

- c. Prohibited locations
 - 1. Municipal Elevator
 - 2. City owned decorative street lighting
 - 3. City Scenic Views
 - 4. Street Frontage along Historical Points
 - 5. Signage support structures

If licensee requests to bypass Street Classification or Support Structure priorities, the City will take consideration of existing infrastructure and locations and will review requests and applications in compliance with Standards and FCC regulations. Small Cell Facility Major Installation review criteria shall apply.

4. *Attachment limitations:*

- a. **Small Cell wireless telecommunication antenna** – attached to a support structure within the public rights-of-way shall have a maximum surface area of 3 cubic feet.
- b. **Small Cell wireless telecommunication facilities** – total combined volume of all above-ground equipment comprising a Small Cell wireless telecommunication facility, exclusive of the antenna, shall be a maximum of 28 cubic feet.
- c. **Small Cell Wireless telecommunication equipment** – shall locate the base of the facilities at a height in compliance with National Electric Safety Code, Americans with Disabilities Act, and Oregon City Municipal Code. Equipment shall be placed in the usable space and shall not inhibit the use of the Right-of-Way by City residents in any way.
- d. **Height** – The highest point of the antenna shall extend no more than seven feet above the highest point of the utility pole, alternative antenna support structure, tower or City-owned infrastructure. A replacement or new utility pole, alternative support structure, third party utility pole, or City-owned infrastructure shall be no more than ten percent higher than an existing adjacent pole or a maximum of the zoning designated height allowance, in height above the ground surface, whichever height is the lesser of the two.
- e. **Color** – A Small Cell wireless telecommunication facility, including all related equipment and appurtenances, shall be a color that matches the pole, blends with the surroundings of the pole, structure tower, or infrastructure on which it is mounted, and uses non-reflective materials.
- f. **Wiring** – All connections and wiring shall be shrouded.
- g. Providers shall not attach or mount any Small Cell Wireless telecommunication equipment onto aerial cable spans.
- h. All Small Cell wireless telecommunication equipment shall be located to avoid any physical or visual obstruction to pedestrian or vehicle traffic, or in any manner create safety hazards to pedestrians, bicyclist, or motorists.

5. *Electrical Service:* Service providers shall be responsible for electrical service coordination to wireless facility. Providers shall not receive power via metered service used to supply power to any street light or other City-owned infrastructure. All electrical service equipment shall match the attaching structure. Electric meters and disconnects shall be located per NESC and NEC code. Providers shall not install generators in the public rights-of-way. All Communication Facilities installed on private property will require review per Oregon City Municipal Standards 17.80 Communication Facilities.
6. *Signage:* Small Cell wireless telecommunication equipment shall not have any signage other than required federal law identification markings.
7. *Noise Reduction:* Noise-generating equipment shall be baffled to reduce sound level measured at the property line to the following levels, except during short durations for testing and operations of generators in emergency situations:
 - a. For any property where no adjacent parcel is zoned residential, the sound level at the property line shall not be greater than fifty dB;
 - b. For all other cases, the sound level shall not be greater than forty dB when measured at the nearest residential parcel's property line.
8. *Lighting:* All lights shall be shrouded.
9. *Screening:* Shall be natural landscaping material subject to the approval of the City and shall comply with all codes, standards and regulations of the City. Provider shall shroud all wiring, connections, and Small Cell wireless telecommunication equipment.
10. *Abandonment and removal:* A Small Cell wireless telecommunication facility located within the corporate limits of the City that is not operated for a continuous period of 12 months, shall be considered abandoned and the owner of the facility, at the owner's sole expense, shall be responsible for the removal of the facility, including its antenna and equipment, within 30 days of receipt of written notice from the City notifying the owner of such facility abandonment. Such notice shall be sent by certified or registered mail, return-receipt-requested, by the City to such owner at the last known address of such owner.
11. *Placement:* No facilities shall be located on sidewalk, bike lane, or street pavement. Facilities shall not inhibit the transportation or access of Oregon City residents to any City-owned Rights-of -Way. Facilities shall be mounted to support structures.
12. Small Cell wireless telecommunication equipment and facilities shall comply with National Electric Safety Code, Americans with Disability Act, Oregon City Small Cell Design and Construction Guidelines for Public Rights-of-Way.