

RESOLUTION NO. 2019-11

**RESOLUTION ADOPTING SMALL CELL WIRELESS FACILITIES
DESIGN AND CONSTRUCTION STANDARDS**

WHEREAS, the City of Forest Grove (the "City") has Constitutional and Charter authority to manage its rights-of-way ("ROW"); and

WHEREAS, on September 26, 2018, the Federal Communications Commission ("FCC") adopted FCC Declaratory Ruling and Third Report and Order 18-133 (the "FCC Order") which significantly limits the City's authority to manage and regulate its rights-of-way ("ROW") in the context of Small Cell Wireless Facility ("SWF") infrastructure deployment by the private sector; and

WHEREAS, the City Council finds that the installation of SWF in the City ROW, which is a limited asset, should be regulated by a single set of standards; and

WHEREAS, the FCC Order imposes certain requirements and limitations on the City's regulation of SWF design and construction standards, which become effective on April 15, 2019; and

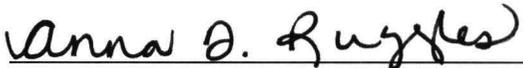
WHEREAS, the City Council finds it necessary to adopt SWF design and construction standards prior to the April 15, 2019, effective date for that portion of the FCC Order applicable to SWF standards; so as to provide City staff guidance in reviewing SWF applications received prior to that date.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF FOREST GROVE AS FOLLOWS:

Section 1: The City of Forest Grove hereby adopts the Small Cell Wireless Facilities Design and General Construction Standards, attached hereto as Exhibit A.

Section 2: This resolution is effective immediately upon its enactment by the City Council.

PRESENTED AND PASSED this 18th day of March, 2019.



Anna D. Ruggles, City Recorder

APPROVED by the Mayor this 18th day of March, 2019.



Peter B. Truax, Mayor

EXHIBIT A

SMALL CELL WIRELESS FACILITIES DESIGN and GENERAL CONSTRUCTION STANDARDS

Standards: Effective March 19, 2019

The following Small Cell Wireless Facilities Design and General Construction Standards were approved by the Forest Grove City Council in Resolution No. 2019-11

Definitions as used in these Design and General Construction Standards:

- (a) **Antenna**: A device designed to transmit radio frequency (RF) signals from a fixed location pursuant with Federal Communications Commission regulations, for the purpose of expanding wireless data capabilities.
- (b) **Antenna Equipment**: Enclosures, switches, cabling, power sources, conduit, and all other materials associated with an antenna at the same fixed location.
- (c) **Attachment**: The wires and facilities that the Licensor may give Licensee Written and/or Electronic permission to install on a Pole.
- (d) **Joint Use Pole**: A Pole owned and maintained by the Licensor and used jointly by the Licensee.
- (e) **Pole**: A utility pole owned and maintained solely by Licensor.
- (f) **Small Cell Wireless Facility**: A wireless broadband facility consisting of a small antenna and an equipment enclosure installed on new or existing infrastructure to facilitate the expansion of macro-wireless capabilities.
- (g) **Monopole**: A pole owned and maintained by the licensee for the sole purpose of a small cell wireless facility.

General Installation Requirements:

- (a) No tag, brand or other device showing Licensee's name or insignia shall be placed on, or attached to, any Pole of Licensor, except such tag or insignia which shows Licensee to be the Licensee or lessee of such Pole and not the owner thereof, and then only after obtaining the written consent of Licensor. Where required by the Licensor, the Licensee agrees to attach information identifying its facilities on the Pole, in a format specified by the Oregon Joint Use Association (OJUA).
- (b) The strength of Poles covered by this Agreement shall be sufficient to withstand the transverse, vertical and longitudinal loads imposed upon them under the storm loading requirements of the NESC assumed for the area in which they are located. Licensee shall provide drawings and a structural analysis report prepared and sealed by a Professional Engineer licensed in the State of Oregon demonstrating the structural adequacy of the pole on which the proponent wishes to attach.
- (c) Any unbalanced loading of Licensor's Pole caused by the placement of Licensee's Attachment shall be properly guyed and anchored by Licensee, at no cost or expense to Licensor. Licensee shall attach its guys only to its own anchors unless otherwise agreed to in writing by Licensor based on extraordinary circumstances as determined by Licensor in its sole discretion.
- (d) When, in the sole discretion of Licensor, existing anchors are adequate in size and strength to support the Attachments of both Parties the Licensee may attach its guys thereto at no additional cost, provided it first obtains written approval of the Licensor. All guys attached to Licensor's anchor shall be insulated. When anchors are not of adequate size and strength, the Licensee shall at no cost or expense to Licensor place additional anchors or replace existing anchors with anchors adequate in size and strength.

Design and General Construction Standards:

(a) Locations

No small cell wireless facilities may be located in a position that impedes traffic for roadways, sidewalks, bicycles, or pedestrians. All small cell wireless facilities are subject to approval of the licensor.

All interest poles, including street light and monopoles, shall match the color and style of surrounding poles.

Licensee shall not install small cell wireless facilities within 50 feet of a signalized intersection, unless otherwise allowed by the licensor. In order for the licensor to consent to installation of small cell wireless facilities within 50 feet of an intersection, the licensee must provide definitive proof that there will be no interference with traffic control devices

Locations for small cell wireless facilities shall be prioritized by the following order of street classifications: (1) principle arterials, (2) arterials, (3) collectors, (4) neighborhood routes, and (5) local residential streets.

Poles used for the installation of small cell wireless facilities shall be prioritized in the following order: (1) utility poles, (2) street light poles, and (3) monopoles for the sole purpose of small cell wireless facilities.

Small cell wireless facilities shall be truck accessible and may only be installed on poles that do not support transmission conductors and do not carry more than one level of primary conductors. In addition, attachment poles may not have more than one single phase transformer, a 3-phase riser, a recloser, a capacitor, or a switch, unless approved by Forest Grove Light and Power.

Small cell wireless facilities shall be located at a minimum of 250 feet apart.

(b) Signage

Signage on attachment poles must be smaller than four inches by six 6 inches and be weather, corrosion and ultra-violet resistant. Signs shall include licensee's name, location identifying information, and 24-hour emergency contact information in a location visible from the ground.

Place radio-frequency (RF) warning sticker required by government regulations as close to the antenna as possible.

Licensee shall remove all equipment labels other than that which are required and may not advertise on small cell wireless facilities.

(c) Antennas

Panel antennas shall not exceed the following dimensions: 2.5 cubic feet, with no dimension larger than 24 inches. Panel antennas shall be mounted as close to the pole as possible while still maintaining climbing space per NESC. No more than two panel antennas may be installed on any given pole for all licensees combined.

Canister antennas may not exceed the following dimensions: 4 feet in height and 1.5 feet in diameter. Only one canister antenna may be installed on monopoles, guy stub poles, or street light poles and must match the color of the structure they attach to.

Strand mount antennas shall not span across roadways, may only be installed between existing poles, be located no more than 6 feet from a pole, and placed 16 feet above ground. The total volume of a strand mount antenna shall not exceed 3 cubic feet.

All antennas must be painted in order to match the color of the pole on which they attach.

(d) Antenna Equipment

Communications equipment associated with the antenna may be mounted in the communications space on a utility pole provided it does not weigh more than 550 lbs, is no larger than 3 feet long x 1.5 feet deep x 2.5 feet tall, does not overload the pole, or conflict with NESC climbing space requirements. Antenna equipment shall be mounted at a minimum of 16 feet above ground and maintain all required NESC electrical clearances.

In the event that a monopole is installed or a street light pole needs to be replaced due to structural requirements, all communications equipment must be installed within the new pole. Base cabinets may not exceed 3 feet in diameter and 4 feet in height.

All equipment installed on the pole, including the antenna, must not exceed a total volume of 21 cubic feet. If the volume exceeds 21 cubic feet, the installation will be classified as a macro-wireless site and follow separate guidelines.

Antenna equipment shall face away from residential and commercial building entrances, windows, and common spaces.

No ground mount antenna equipment shall be permitted.

All antenna equipment on monopoles, street light and decorative poles must be painted in order to match the color of the pole on which they attach. Fans on antenna equipment are not to exceed 50 decibels.

(e) Conduit

Conduits shall be installed and grounded per NEC standards. Locate conduits as close to the pole as possible while maintaining climbing space as required per the NESC. A maximum of four conduits may be installed which include one for power cables and three for communications cables. The conduits may be a maximum of 4 inches in diameter.

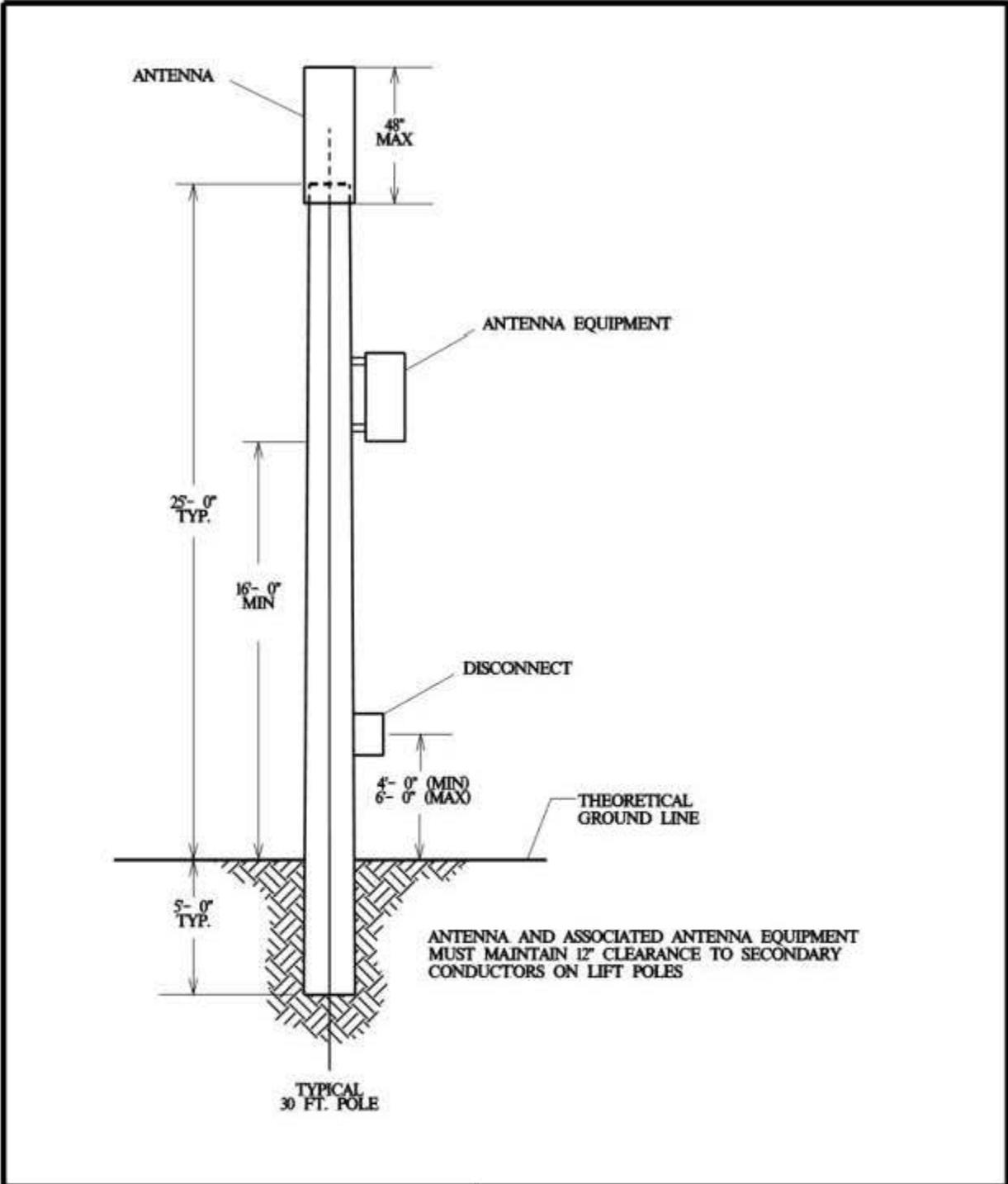
(f) Disconnect Switch

The licensee shall install and maintain a load-break disconnect capable of disconnecting both AC power from the utility and backup DC power to communications equipment. The UL-listed disconnect shall be located near the equipment to be de-energized. Licensee must provide a dual hasp lock for utility access to the disconnect switch.

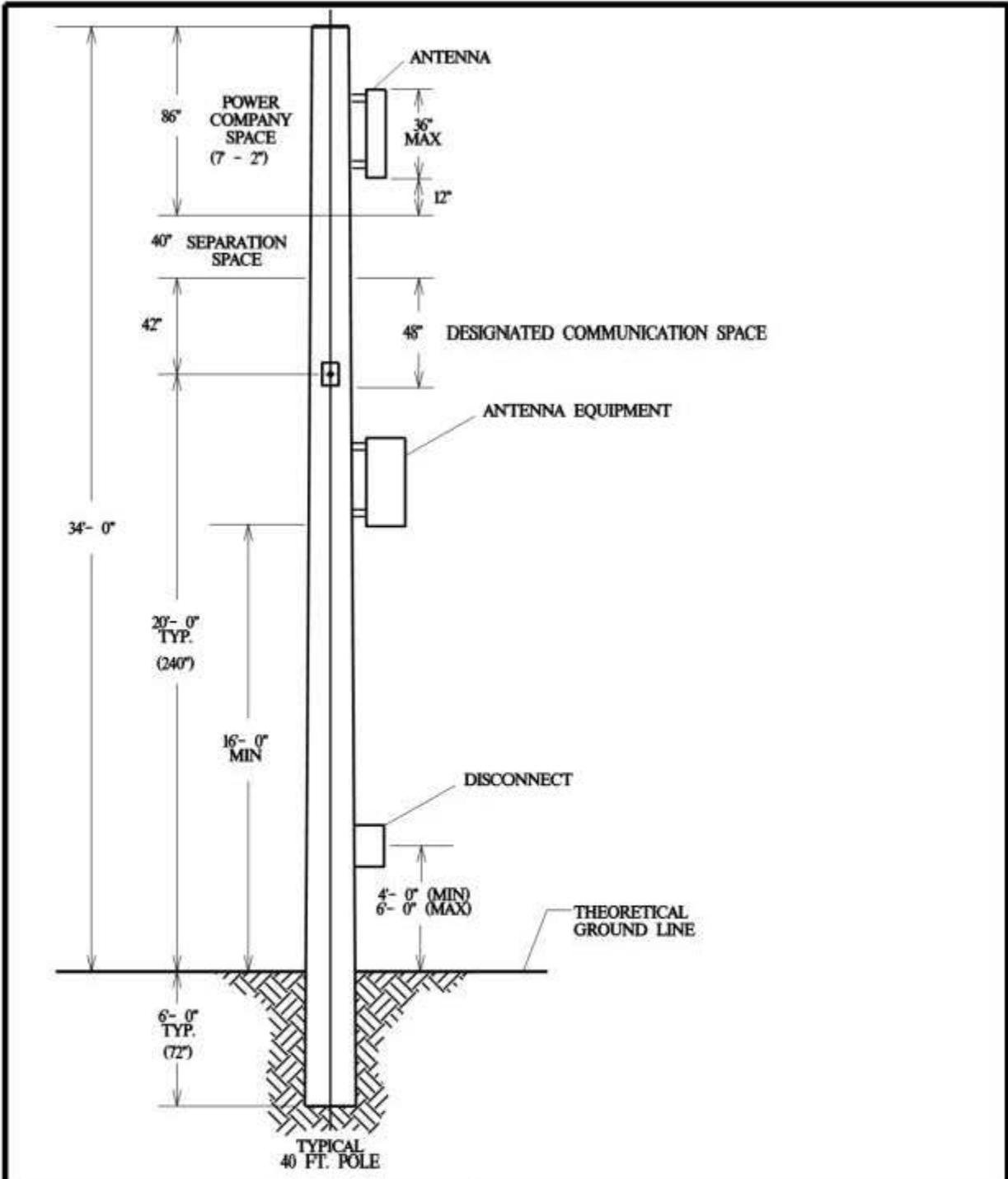
POLE ATTACHMENT DESIGN/GENERAL CONSTRUCTION STANDARDS EXHIBITS

Standard Small Cell Attachment Drawings

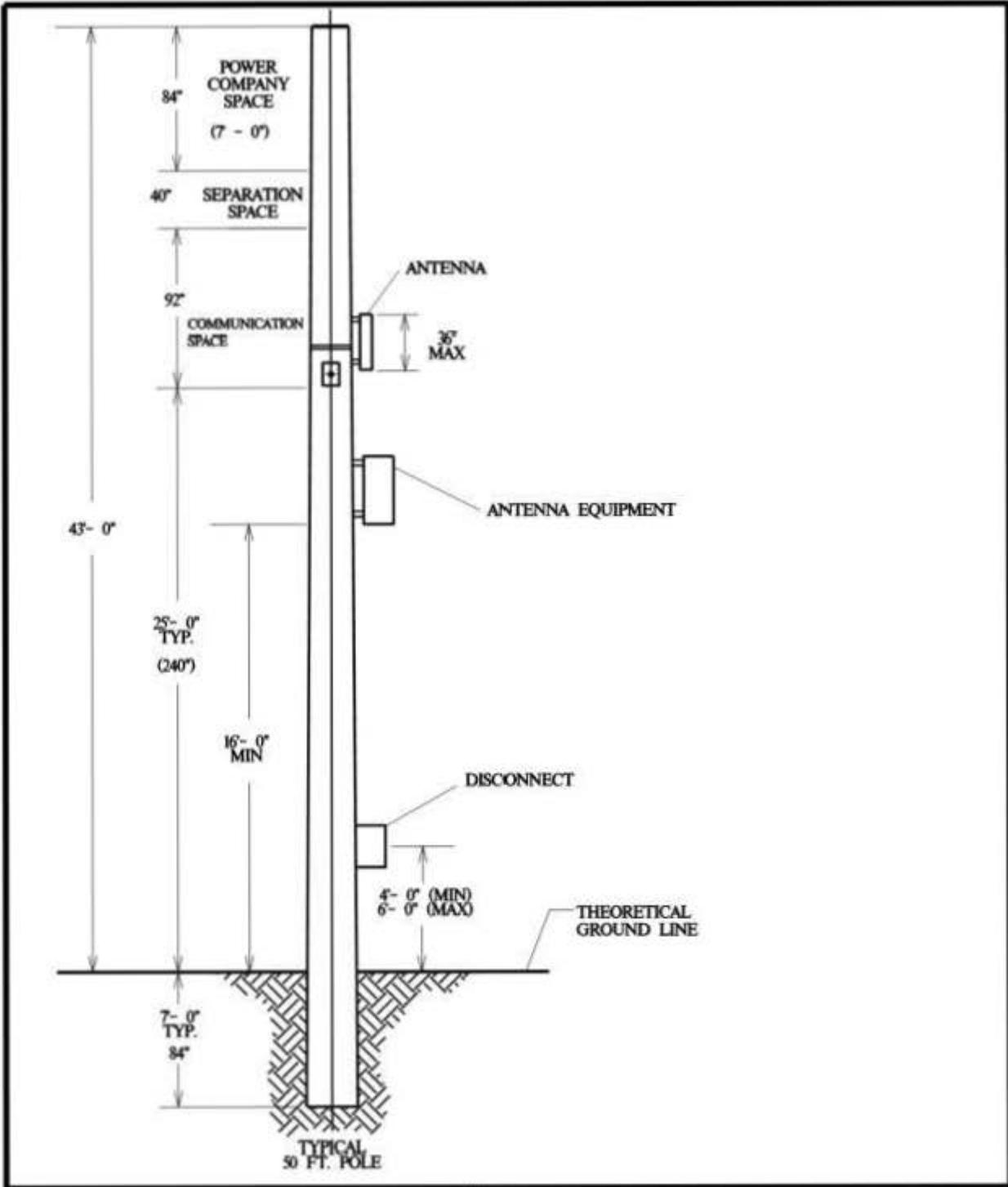
- Small Cell Wireless Facility Space Allocation – Guy Stub and Lift Pole
- Small Cell Wireless Facility Space Allocation – In Power Space
- Small Cell Wireless Facility Space Allocation – In Communications Space



| | | |
|--|---------------------------------------|---------------------|
| SMALL WIRELESS FACILITY SPACE ALLOCATION GUY STUB AND LIFT POLE | FOREST GROVE LIGHT & POWER | |
| | DATE: 2/13/2019 | SCALE: NTS |
| | DRAWN BY: JWP | REVIEWED: KH |
| | REVISED: 2/13/2019 | K7 |



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|--|---------------------------------------|---------------------|
| SMALL WIRELESS FACILITY SPACE ALLOCATION IN POWER SPACE | FOREST GROVE LIGHT & POWER | |
| | DATE: 2/13/19 | SCALE: NTS |
| | DRAWN BY: JWP | REVIEWED: KH |
| | REVISED: 2/13/19 | K8 |



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|---|---------------------------------------|---------------------|
| SMALL WIRELESS FACILITY SPACE ALLOCATION IN COMMUNICATIONS SPACE | FOREST GROVE LIGHT & POWER | |
| | DATE: 2/13/19 | SCALE: NTS |
| | DRAWN BY: JWP | REVIEWED: KH |
| | REVISED: 2/13/19 | K9 |



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|-------------------------|--------------|
| CITY RECORDER USE ONLY: | |
| AGENDA ITEM #: | 8 |
| MEETING DATE: | 3-18-19 |
| FINAL ACTION: | RESO 2019-11 |

CITY COUNCIL STAFF REPORT

TO: City Council

FROM: Jesse VanderZanden, City Manager

MEETING DATE: March 18, 2019

PROJECT TEAM: Keith Hormann, Light & Power Director
Joel Peterson, L&P Engineering Manager
Paul Downey, Administrative Services Director

SUBJECT TITLE: Resolution Adopting Small Cell Wireless Facilities Design and General Construction Standards

| | | | | | | | | | | |
|-------------------|--------------------------|-----------|--------------------------|-------|-------------------------------------|------------|--------------------------|--------|--------------------------|---------------|
| ACTION REQUESTED: | <input type="checkbox"/> | Ordinance | <input type="checkbox"/> | Order | <input checked="" type="checkbox"/> | Resolution | <input type="checkbox"/> | Motion | <input type="checkbox"/> | Informational |
|-------------------|--------------------------|-----------|--------------------------|-------|-------------------------------------|------------|--------------------------|--------|--------------------------|---------------|

X all that apply

ISSUE STATEMENT: The Federal Communications Commission (FCC) has issued an Order addressing design standards and fees for small cell wireless facilities (SWF) located in City right-of-way (ROW). This staff report addresses the design standards portion of the Order. The Order imposes certain requirements and limitations on the City's regulation of design and construction standards which become effective April 15, 2019. City can adopt design and construction standards prior to April 15, 2019, to establish guidance on the design and construction of SWF in the City ROW. Staff has drafted a resolution setting design and construction standards for SWF for Council consideration.

BACKGROUND: Staff has presented information about the FCC Order and the City establishing design and construction standards at two work sessions including one on February 25, 2019. As part of the staff report, staff has prepared a presentation which summarizes the major points to be presented tonight. The design and construction standards do not address all aspects of installing SWF in the ROW. A separate Small Cell Wireless Facilities Pole Attachment License Agreement (Agreement) will address other issues relevant to the process. An example of an item addressed in the License Agreement is that an approved SWF application is valid for only 6 months. If construction has not commenced within six months, a new application must be submitted. This provision is to prevent carriers from reserving certain poles but never actually constructing the SWF.

At the February 25, 2019, the Council asked the following questions:

Who will own the monopoles? Staff Response – the carrier will own any monopoles that are installed. The Design and Construction Standards and the Agreement will state that

monopoles are owned by the Licensee (the cell phone company) who will be required to maintain the monopoles.

What if SWF are abandoned? Staff Response - the License Agreement will require that the abandoned facilities be removed and the ROW be returned to original condition.

Who pays for power to the pole and costs to get the poles ready? Staff Response - the License Agreement addresses these items and requires the carrier to pay those costs.

The Design and Construction Standards could change over time depending on rulings by the Ninth Circuit Court of Appeals.

FISCAL IMPACT: There is no fiscal impact as this resolution sets design and construction standards. The fiscal impact to the City is addressed in the SWF fee resolution that Council will be asked to consider at this meeting.

STAFF RECOMMENDATION: Staff recommends the City Council approve the attached resolution adopting small cell wireless facilities design and construction standards.

ATTACHMENT(s):

Presentation of Small Cell Construction Standards

Resolution Adopting Design and Construction Standards (Exhibit A)



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**NOTICE OF PUBLIC HEARING
ADOPTING SMALL CELL WIRELESS FACILITIES
DESIGN AND GENERAL CONSTRUCTION STANDARDS AND FEES
FOR THE CITY OF FOREST GROVE**

NOTICE IS HEREBY GIVEN, that the Forest Grove City Council will hold a **Public Hearing** on **Monday, March 18, 2018**, at **7:00 p.m.** or thereafter, in the Community Auditorium, 1915 Main Street, Forest Grove, to consider adopting Small Cell Wireless Facilities Design and General Construction Standards and establishing fees applicable to small cell wireless facilities located within the City of Forest Grove right-of-way. The resolutions, upon approval by the City Council, would be effective immediately.

This hearing is open to the public and interested parties are encouraged to attend. A copy of the staff report and proposed resolutions are available for inspection prior to the hearing at the City Recorder's Office or by visiting the City's website at www.forestgrove-or.gov. Written comments or testimony may be submitted at the hearing, e-mailed to aruggles@forestgrove-or.gov, or sent to the attention of the City Recorder's Office, P. O. Box 326, 1924 Council Street, Forest Grove, OR 97116, prior to the hearing. For further information, please call the City Recorder's Office at 503.992.3235.

**Anna D. Ruggles, CMC, City Recorder
City of Forest Grove**

Published Wednesday, March 13, 2019
FG NewsTimes

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Small Cell Construction Standards

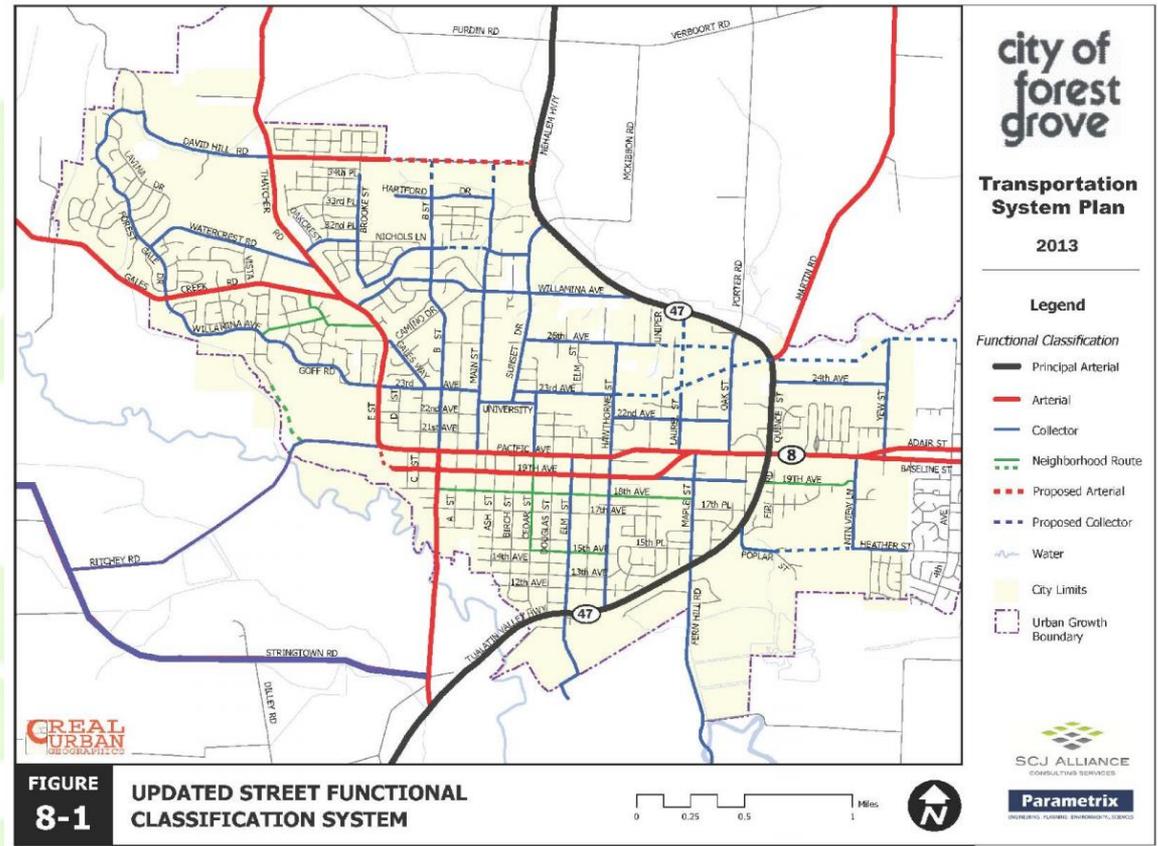
Keith Hormann, Light & Power Director
Joel Peterson, Light & Power Engineering Manager

3/18/19

Locations

Street Priorities

- Principle Arterials
- Arterials
- Collectors
- Neighborhood Routes



Locations

Pole Priorities

- Utility Poles
- Street Light Poles
- Monopoles

Restrictions

- May not impede roadway, walkway, or bicycle lane
- Equipment may not be located near entrance of a business or residence
- Facilities must maintain a minimum 250 feet separation

Utility Pole Installation

Requirements

- Install in power or communications space
- Maximum of two antennas
- Equipment Cabinet located 16 feet above ground

Size Limitations

- Equipment Cabinet
 - Maximum: 2.5 ft. tall x 3 ft. long x 1.5 ft. deep
- Antenna
 - Maximum: 2 ft. in any direction and 2.5 cubic ft.

Examples



Street Light/Monopole Install

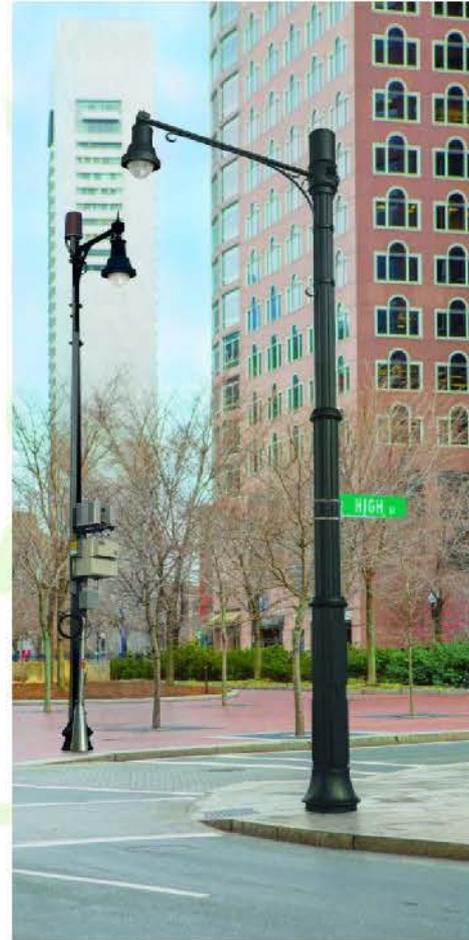
Requirements

- New pole be installed
- Antenna mounted on top
- Cabinet incorporated into the base
- Color and style must match surrounding structures

Size Limitations

- Cabinet
 - Maximum: 3 ft diameter and 4 ft tall
- Antenna
 - Maximum: 4 ft tall and 1.5 ft diameter

Examples



Safety

Normal Conditions

- RF warning stickers near antenna
- All installations must comply with FCC regulations
- No small cell equipment installed above high voltage lines

Emergency Situations

- Lockable disconnect accessible to lineman
 - Disconnects all AC as well as DC backup feeds
- 24-hour contact information tag on pole
- Ability to disconnect small cells to restore power



6605 SE Lake Road, Portland, OR 97222
PO Box 22109 Portland, OR 97269-2169
Phone: 503-684-0360 Fax: 503-620-3433
E-mail: legals@commnewspapers.com

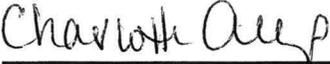
AFFIDAVIT OF PUBLICATION

State of Oregon, County of Washington, SS I, Charlotte Allsop, being the first duly sworn, depose and say that I am the Accounting Manager of the **Forest Grove News Times**, a newspaper of general circulation, serving Forest Grove in the aforesaid county and state, as defined by ORS 193.010 and 193.020, that

**City of Forest Grove
NOTICE OF PUBLIC HEARING
ADOPTING SMALL CELL WIRELESS FACILITIES
DESIGN AND GENERAL CONSTRUCTION
STANDARDS AND FEES
FOR THE CITY OF FOREST GROVE**

Ad#: 97618

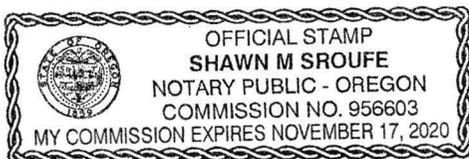
A copy of which is hereto annexed, was published in the entire issue of said newspaper(s) for 1 week(s) in the following issue(s):
03/13/2019


Charlotte Allsop (Accounting Manager)

Subscribed and sworn to before me this 03/13/2019.


NOTARY PUBLIC FOR OREGON

Acct #: 104052
Attn: Anna D. Ruggles
FOREST GROVE, CITY OF
PO BOX 326
FOREST GROVE, OR 97116



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Anna D. Ruggles, CMC, City Recorder
City of Forest Grove
Publish March 13, 2019.

FGNT97618

Date: March 18, 2019

Agenda Item: #8

Subject: Small Cell Wireless Facilities Design Standards

Request to Testify at Public Hearing

Public Hearings – Public hearings are held on each matter required by state law or City policy. Anyone wishing to testify should sign in for the Public Hearing prior to the meeting. The presiding officer will review the complete hearing instructions prior to testimony. The presiding officer will call the individual or group by the name given on the sign-in form. When addressing the Council, please move to the witness table (center front of the room). Each person should speak clearly into the microphone and must state name and an address for the record. All testimony is electronically recorded. In the interest of time, Public Hearing testimony is limited to three minutes unless the presiding officer grants an extension. Written or oral testimony is heard prior to any Council action.

Please sign-in below to testify.

PROPONENTS: (Please print legibly)

First & Last Name:

Address:

City, State & Zip Code:

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| _____ | _____ |
| _____ | _____ |

OPPONENTS: (Please print legibly)

First & Last Name:

Address:

City, State & Zip Code:

Steve Coon (on behalf of Verizon) 19950 NW Tangsbourne Dr. Hillsboro OR
97124

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| _____ | _____ |
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OTHERS: (Please print legibly)

First & Last Name:

Address:

City, State & Zip Code:

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