



**CUPERTINO**

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**PUBLIC WORKS DEPARTMENT**

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**GUIDELINES FOR ENCROACHMENT PERMIT SUBMITTALS FOR  
WIRELESS COMMUNICATIONS SMALL WIRELESS FACILITIES ON CITY  
OWNED POLES**

*The City of Cupertino seeks to permit wireless carriers to install small wireless ~~communications~~ facilities, within the public right-of-way, in order to provide robust cellular coverage and capacity throughout the City, while ensuring facilities are well maintained and do not significantly detract from City streetscapes.*

*The City does not regulate the technologies wireless carriers use, but it does have certain powers to regulate the time, place, manner, and aesthetics of wireless communications facilities. These guidelines are intended only to convey location and design preferences that may not necessarily apply to every small cell facility.*

*~~These guidelines also do not address pole selection. However, t~~These guidelines provide information on City preferences for pole selection for small cell facilities, as well as the information the City needs to permit installation of small cell facilities in less-preferred areas. The City recommends that wireless carriers make every attempt to avoid pole locations that are less preferred, where equipment would be in front of architecturally significant features, or in locations where they would have visual impacts of significance, such as in areas where views to public art works would be obstructed.*

*~~Wireless providers should be made aware of the~~The City prefers's preference for installation of small cell facilities on City owned street-lights, due to the improved aesthetic qualities of these facilities. Wireless providers should work with the City to establish an agreement for the use of City owned street-lights.*

*Below are requirements and guidelines to aid wireless providers in planning facility locations and compiling the necessary information to obtain encroachment permits for small cell wireless facilities on City-owned poles. Wireless communications providers are also directed to review and comply with the City's "Wireless Facilities Master Plan" that can be found on the City's website.*

## **Recommended Design Elements**

Proposed wireless small cell facilities should substantially conform to the City's Small Cell Design Standards found here:

<https://www.cupertino.org/Home/ShowDocument?id=24383>

### **Use of ~~Existing~~ City Streetlights**

A small cell facility proposed to be placed on a streetlight pole shall, except as provided below, be placed where an existing streetlight pole is located. New streetlight pole installations, where none currently exist, are prohibited unless expressly approved by the Public Works Department. New pole proposals may be permitted where the new pole infills gaps in streetlight coverage, per the Public Works Department's spacing guidelines (typically spaced every 150 feet and staggered from one side of the road to the other).

Existing streetlight poles and foundation proposed for a wireless facility installation shall typically be replaced with a new pole and new foundation. The City's existing streetlight poles follow the 1992 Caltrans Type 15 standards, including foundation, which have typically proven to lack the structural integrity necessary to support the addition of wireless equipment.

Where an existing streetlight pole must be replaced to provide the necessary structural integrity for wireless equipment, the pole's foundation shall be completely removed during the pole replacement process. No foundation materials will be permitted to be abandoned in place. It is preferred that a new foundation be placed in the same location as the original foundation. If a new foundation cannot be placed in the same location, the applicant shall situate the new foundation as close to the original location as possible, and shall make any modifications to the mast arm that are necessary to ensure that the luminaire is in general alignment with adjacent streetlights, where feasible. If the City approves relocation of the foundation, the former foundation hole must be filled with a 2-sack controlled density fill.

Preferred Equipment Configurations:

Equipment placement configuration shall utilize the following layouts (in order of preference):

- 1) Utilize underground vaults where feasible. Grounds for infeasibility include, but are not limited to, instances where undergrounding could create environmental concerns, such as equipment that would emit noise or that would require connections to City storm drain systems. The Underground vaults shall be the minimum volume necessary to house WCF equipment. Maximum vault size shall not exceed 4 feet 6-inches \* 8 feet \* 5 feet 7-inches deep, excluding space required for ventilation or dewatering equipment. Modifications to these maximum dimensions shall only be permitted at the City's discretion.
- 2) Where equipment cannot be placed in below grade vaults, the wireless facility designer shall, to the maximum extent possible, conceal radio equipment and the associated antenna(s) within a shroud at the top of the pole.
- 3) When radio equipment cannot be placed in the shroud, equipment shall be attached to a pole behind existing signage, but in no event shall it obscure or interfere with the visibility or functioning of the signage.
- 4) When no signage is available to conceal equipment being placed on the pole, the wireless facility designer shall situate equipment on the pole to minimize views of the equipment, such as placing the equipment on the side of the pole opposite the oncoming vehicular traffic, or, at the City's sole discretion, shall utilize a pole design with an integrated base enclosure to conceal equipment.
  - Equipment placed on a pole where no signs are available for screening purposes shall typically be placed on the side opposite the direction of traffic.
  - The base enclosure design shall utilize poles that are located outside of driveway and intersection sight lines, as established by City standard details (7-2, 7-4 & 7-6).

Preferred Equipment Configurations:

- ~~1) To the maximum extent practical, equipment shall be placed in below grade vaults.~~

~~2) — Where equipment cannot be placed in below grade vaults, the wireless facility designer shall to maximum extent possible, conceal equipment within the antenna shroud, and behind street signs located on the pole.~~

~~3) — Where facilities cannot adequately be hidden within the shroud and behind street signs on the pole, the wireless facility designer shall utilize a pole design with an integrated base enclosure to conceal equipment.~~

~~When utilizing the base enclosure design, the wireless facility designer shall choose poles that are located outside of driveway and intersection sight lines, as established by City standard details (7-2, 7-4 & 7-6).~~[Additional equipment placement considerations:](#)

- [Minimum elevation for antenna shall be 26 feet above ground level. This minimum elevation is consistent with City Standard Streetlight dimensions.](#)
- [Maximum elevations for antenna and shrouding equipment shall be 41 feet above ground level in non-residential zones, and 36 feet above ground level in residential zones. These maximum elevations are consistent with City Standard Streetlight dimensions.](#)
- [All components external to the pole shall have an integral color or shall be painted to match the color and/or materials of the pole.](#)
- [All wires and cabling shall be routed entirely underground and within the pole and any attached shroud, unless existing overhead electrical lines serve power to the pole and the electrical provider approves the overhead connection.](#)
- [Proposed carrier fiber conductor to the streetlight pole shall be routed around, and not through, the City's electrical pull box. Carrier fiber conductor may intercept \(through a cut-in "Y"\) and co-share the electrical conduit between the pole and the City's electrical pull box. A max-cell innerduct must be used to separate fiber conductor from electrical conductor in the co-shared conduit. An alternative to this is for the carrier fiber to be placed directly from the carrier's fiber pull box to the streetlight pole, through a new conduit sweep dedicated for fiber conductor, installed as part of the replaced pole foundation;](#)
- [No equipment cabinets may be placed at grade without express approval of the City.](#)
- [Existing streetlight luminaires that are not LED shall be replaced with a City standard LED fixture for all new wireless small cell facility installations.](#)

- Existing banner hanging devices located on poles to be replaced shall be salvaged and reinstalled on the new facility. In no case shall wireless equipment interfere with the City's ability to utilize these devices or to hang banners.

Any modification to existing small cell wireless equipment requires an encroachment permit from the Public Works Department. Installations of additional antennae, or modifications in power output, will require that the applicant provide the City with a permit application, construction plans, photo simulations, updated Electromagnetic energy (EME)/radio frequency report or certification that the facility is operating in compliance with FCC emission limits, structural report, noise study report, updated circuit analysis calculation and an updated activation report, showing compliance with the Federal Communications Commission (FCC) EMF limits.

### Permitting Process for Small Cell Facilities on City-Owned Streetlight Poles

#### 1) Pole Availability Request and Reservation:

Prior to an Initial Encroachment Permit Application Submittal (see below), applicants for small cell facilities are encouraged to submit a Pole Availability Request and Reservation with the Department of Public Works. The Pole Availability Request and Reservation process will verify whether a streetlight is available for a small cell facility, and if the proposed equipment layout is acceptable for the pole. If the pole is available for the carrier's use, the City will reserve the location for a period of one year, or until the location is requested by another carrier, at which time the City will notify the original requestor that an encroachment permit application must be submitted within 30 days or the reservation will be forfeit.

When a Pole Availability Request is made, the applicant shall provide information to the City that shows why the proposed location is either 1) the most preferred site in the general area, or 2) the only feasible option available to address the carrier's needs. See Attachment C for further information on siting preferences guidelines.

A Pole Availability Request submittal should consist of:

- A map showing the location of the streetlight pole where a small cell facility is desired to be located. This map should be in the form of a Google KMZ file, or some other file type that clearly shows the streetlight being indicated.

- Information on the equipment and layout being proposed (e.g. all equipment within the shroud, equipment on the pole screened by signs, base enclosure, underground vault, or equipment on the pole situated to minimize views of equipment).

The Public Works Department will review, evaluate and respond to Pole Availability Requests within 14 days of submittal. The City prefers that no more than 10 locations for Pole Availability Requests be submitted for review at a time. Pole Availability Requests are not subject to FCC shot clocks, and do not begin the shot clock timeline. Applicants are encouraged to reach out to the Department of Public Works regarding pole availability early to minimize time and engineering costs should the pole be unavailable for their use.

Any poles previously reserved by the carrier that are within a 500-foot radius of a newly requested site must be relinquished.

If the location of a Pole Availability Request is deemed acceptable, the applicant may submit an Initial Application.

Items to include for Pole Availability Request:

- Electronic Map of proposed locations.
- Information on the type of installation being proposed, including all proposed equipment on the pole, and within the shroud.
- Preferred siting justification for poles located in Category 2 and 3 areas, as indicated in Attachment C.

~~4)2)~~ Initial Encroachment Permit Application Submittal Requirements:

All encroachment permit applications for small cell facilities within the public right of way shall be submitted to the Public Works Department for review. The City prefers that an applicant have a maximum of ten (10) active Initial Encroachment Permit Applications at any time. If an applicant submits more than 10 applications, the City reserves the right to request that the applicant enter into an agreement tolling the shot clock for a reasonable period to allow City review of the applications, or that each application in excess of ten (10) be accompanied by an initial \$5,000 deposit to cover third-party review costs. Deposits submitted to the City will be used to cover City staff time as well as actual third-party costs plus a 15 percent (15%) administrative fee as established in the City's fee schedule. Any costs the City incurs that exceed the

initial deposit shall be paid by the applicant prior to encroachment permit issuance. Any unused portions of submitted deposits will be refunded to the applicant. Submittals shall show the proposed location and the facilities planned for construction, with a photo-simulation depicting the existing and proposed conditions (see Attachment A for information to be included in the photo simulation). The submittal shall also provide information on the anticipated power consumption (total wattage) of the facility, and whether fans or other noise emitting equipment ~~is~~are being proposed. New facilities located in residential areas shall be of a type that does not emit noise. The submittal for any location where a fan is proposed shall include ~~information~~ a report, stamped and signed by a qualified registered engineer, on the anticipated DBA levels and shall show compliance with the City of Cupertino's noise ordinance. If a Pole Availability Request was not made before the initial encroachment permit application submittal, the applicant shall submit information regarding site preferences (per Attachment C) at this time.

Public Works will review the proposed location and facilities for general compliance with ~~build-outs that minimize visual impacts~~ these guidelines. Features that help to ~~minimize~~ reduce visual impacts include:

- ~~Proposed equipment that is located in~~ Locating equipment in underground vaults, ~~to maximum extent possible~~ where feasible.
- Concealing equipment in the antenna shroud and behind street signs;
- Concealing equipment within a base enclosure integrated into the pole;
- Concealing wires from view;
- Locating new facility installations near property corners or side property lines, and not directly in front of residences and businesses;
- Minimizing views from habitable living areas (such as bedrooms or living rooms) of residential units which directly face the proposed small cell facility ~~antenna within 100 feet horizontal distance~~;
- Locating facilities no closer than 20 feet to occupied structures or 100 feet to a school structure.
- Ensuring there are no flashing lights or large repetitive warning stickers that are unnecessary, distracting, poorly placed, or non-essential. Warning stickers shall be placed where appropriate, and not at pedestrian eye level, unless directed to do so by the FCC or other regulatory agencies;
- Ensuring that pole height increases are minimized, but not ~~excessive~~ more than 20-percent of the existing pole height ~~and/or unnecessary~~;



- ~~Minimizing~~ Ensuring the dimensions of equipment offsets from poles are the smallest feasible;

The initial review process may result in the Public Works Department having comments or concerns regarding the proposed design and location. The Public Works Department may request that facilities be relocated and/or the design be modified to better fit the existing ~~features~~ setting.

The applicant shall ensure that the operation of new facilities will not cause interference with existing facilities, such that an existing facility would be required to increase its power source or install other /additional equipment to continue proper service. These potential impacts should be considered, measured and mitigated prior to approval of a new facility.

After the Public Works Department deems the initial submittal acceptable, the applicant will be required to notify the surrounding property owners.

Items required for Initial Encroachment Permit Submittal:

- Preliminary construction drawings showing site plan and proposed equipment to be installed.
- Photo simulations showing existing and proposed appearance of the facility.
- Circuit trace and power consumption calculation to ensure adequate power is available, or proposed modifications to circuitry to facilitate power.
- Electromagnetic energy (EME)/radio frequency report to demonstrate that allowable exposure limits are not exceeded.
- Acoustic noise level report on the anticipated DBA levels that shall show compliance with the City of Cupertino's noise ordinance.
- Structural analysis study to demonstrate that the existing pole or a new pole will adequately support all proposed equipment.

~~2)~~ 3) Notification Process:

After the City has vetted and provided preliminary approval of a site and the proposed design for a new small cell facility, the Applicant is required to notify all property owners and residents within ~~300~~ 500 feet of the proposed installation. Notification materials s to residents will include a description of the project and the purpose of the proposed facility. The Applicant will provide to the City a mailing list



that includes both owners and tenants (occupant designation for tenants is acceptable) to be notified of the proposed facility installation.

Direct Mailers/Courtesy Letter

~~These p~~Property owners whose properties are ~~nearest to~~within 500-feet of the a proposed ~~facilities~~facility shall be notified by registered mail via the U.S. Postal Service. Property owners will be given ~~14~~21 calendar days to contact the Applicant with any questions or concerns. The Applicant shall provide an affidavit stating all property owners on the mailing list were sent letters, and it shall indicate the date the letters were deposited with USPS.

The letter will provide a description of the purpose of the proposed facility and an aerial map identifying the proposed location of the ~~cabinet~~facility. In addition, photo simulations of the proposed equipment and an excerpt of the construction plans showing the site plan and elevations are to be included. The notification shall also include a telephone number ~~or~~and email address for the Applicant's Community Liaison, ~~with~~ whom property owners ~~can~~may contact with any questions or concerns regarding the facility. The Applicant's Community Liaison shall reply to all inquiries within ~~48~~72 hours of contact and provide a copy of each response to the City. Additionally, the notification shall include a contact number for the Public Works Department – (408) 777-3354 – so that property owners can contact the City directly, if they so prefer. The applicant shall log all contact with property owners or residents/occupants, which shall include the date, owner/resident's name, address and the specific questions or concerns the owner/resident has regarding the facility.

Upon completion of the notification period, the Applicant shall ~~inform~~provide the Public Works Department with a compilation of all inquiries received ~~during the notification period (if any), so that the Public Works Department may assess the~~including a breakdown of the comments and concerns regarding the application, and, when possible, the inquirer's name, address and contact information. The list shall be accompanied by an affidavit stating all inquiries received have been compiled and provided to the City, or that no inquiries were received in such event. ,andThe applicant will work with the ~~applicant~~City to address ~~these~~any concerns to the maximum extent practicable.

Items required for submittal to the City for the Notification Process include:

- A copy of the letter and exhibits to be mailed to residents that own or live within 500-ft of a proposed location.

- An aerial map showing the location of the proposed new facility and the properties outlined that are within the 500-ft outreach area.
- A list of all property owners and residents to receive the notification, including their address.
- Affidavit stating all listed property owners and residents were mailed the letter and the date the letters were deposited with USPS.

Items required after the notification period has ended:

- Compiled list of all inquiries received.
- Affidavit stating all inquiries were transmitted to the City.

~~3)4)~~ Final Encroachment Permit Application Submittal Requirements:

After the notification period is concluded, and the applicant and the City have worked to address the comments ~~and concerns~~ received through the notification process, the applicant will submit to the Public Works Department the ~~final~~ Final Encroachment Permit Application ~~which will include~~.

Items to be submitted for Final Encroachment Permit Application:

- Completed Encroachment Permit Application.
- Final signed and stamped Improvement Plans (including photo simulations and electrical plans). \*
- Traffic Control Plans.
- Contractor's Insurance Certificate (with the City of Cupertino named as additionally insured).
- City of Cupertino current business license for both Applicant and Contractor.
- Payment of encroachment permit fees.
- List of properties to receive construction notification Door Hangers.
- Encroachment Agreement/Commencement Letter establishing a pole license for the site, a start date for annual use payments, and connecting the installation to the License Agreement.

*(\*See Attachment A for items to be included on the plans.)*

Door Hanger Notice

After the Public Works Department approves an encroachment permit, and at least one-week before commencement of construction activities, the applicant shall place a

“Door Hanger” Notice at all properties that will be affected by construction of the facilities. Properties that would be affected include, but are not necessarily limited to, those that are immediately adjacent to, as well as across the street from, the construction operations and staging areas, any properties where “No Parking” signage is placed in front of their residences, and those properties that would be affected by traffic control facilities or that may experience restricted access due to the operations. This notice will inform the property owners of the upcoming construction and will offer a contact number for the applicant so that property owners can call in construction related inquiries and concerns.

~~4)~~5) Post-Construction Requirements:

After ~~a~~the facility has been constructed, the Applicant shall provide to the Public Works Department as-built drawings showing any modifications from the approved drawing plans (any modifications made during construction shall be approved by the City prior to implementation). If no modifications from the approved plans were made, the Applicant shall simply make this point clear after construction is completed, and the approved plans on file with the City shall be utilized for the as-built drawing requirement. The Applicant will also be required to cover all reasonable costs associated with the measuring, recording, reporting and monitoring of emissions, including EMR/RF and noise associated with the wireless communications facility. Such information shall be provided, within 30 days of activation of the equipment, in an Activation Report which shall be made available to any interested party through the City of Cupertino’s Public Works Department.

The Activation Report shall be prepared by a ~~certified professional~~qualified registered engineer (in the State of California), or other technical expert approved by the City of Cupertino and shall provide information that demonstrates the facility will not cause any potential exposure to RF emissions that exceed adopted FCC standards for human exposure. Testing shall be conducted in compliance with FCC regulations governing the measurement of RF emissions and shall be conducted during normal business hours on a non-holiday week-day with the subject equipment measured while operating at maximum power. For all measurements made, evidence must be submitted showing that the testing instrument(s) used were calibrated within their manufacturer's suggested periodic calibration interval, and that the calibration is by methods traceable to the National Bureau of Standards. At the sole option of the City Engineer, an agent of the City may monitor the performance of testing required for preparation of the Activation Report.

Notification prior to Activation Report

The Applicant shall undertake to inform and perform appropriate tests for residents of dwelling units located within 100 feet of the transmitting antennae at the time of testing for the Activation Report.

- At least 14 calendar days prior to conducting the testing required for preparation of the Activation Report, the Applicant shall notify the Department of Public Works, and shall send a letter, via registered mail through the U.S. Postal Service, to the resident of any dwelling unit within 100 feet of a transmitting antenna, notifying them of the date on which testing will be conducted.
- Residents notified of the testing may request, in advance of the test, that the Applicant conduct testing of total power density of RF emissions within their residence on the date on which the testing is conducted for the Activation Report.
- Within 30 days of the installation and operation of the facilities, the Applicant shall confirm [and submit](#) in writing to the Public Works Department, through an Activation Report, that the facilities are being maintained and operated in compliance with applicable Building, Electrical and other Code requirements, as well as applicable FCC emissions standards.

[See Attachment B for the Wireless Communications Facility Project Completion Checklist. Each item on the checklist shall be verified prior to sign-off and closeout of the encroachment permit.](#)

Items to be submitted for Final Encroachment Permit issuance:

- [As-built drawings \(if applicable\).](#)
- [Activation Report.](#)

~~(See Attachment B for Wireless Communications Facility Project Completion Checklist)~~

Key Milestones

1. Identify placement of facilities - ~~Applicant will develop a deployment plan and schedule, and will share this information with the Public Works Department.~~ Applicant shall work with the City of Cupertino regarding the planned build out of wireless ~~communications facilities, and~~ [communications facilities and](#) shall

supply a map of proposed siting locations as plans and information become available.

2. Complete field verification – Applicant shall have an engineer visit each individual location/area to identify living units, building addresses, existing facilities, distance measurements, Public Right of Way and private property lines. The Engineer shall also identify other potential sites for Small Cell Facilities ~~in the event that~~ if the Applicant's first choice is not realized. Applicant will consider public safety, aesthetics, the overall network design, and will be ~~consistent~~ will work to comply with all siting criteria ~~agreed to with the City of Cupertino.~~
3. ~~Initial Submittal~~ Pole Availability Request and Reservation – Applicant ~~shall~~ is encouraged to submit ~~an initial location~~ a pole availability request package to the City of Cupertino for review and comment. The package ~~shall~~ should include a vicinity map, ~~a photo of the pole, and a simple photo sim showing the layout and location of proposed equipment~~ information on the type of installation being proposed, and preferred siting justification, if applicable. The City will review the ~~Initial Submittal~~ request for compliance with these guidelines, location concerns and for aesthetic qualities and features of the equipment. The City may request, at this time, that alternative locations or design features be utilized or considered. Applicant ~~is encouraged to~~ shall work with the City to address initial comments and concerns prior to the ~~notification process~~ initial encroachment permit application submittal.
4. Initial Encroachment Permit Application Submittal – Applicant shall submit preliminary construction drawings showing the site plan and the proposed equipment to be installed, photo simulations of the existing and proposed appearance of the streetlight pole, a circuit trace and power consumption calculations, electromagnetic energy (EME)/radio frequency report to demonstrate that allowable exposure limits are not exceeded; acoustic noise level report on the anticipated DBA levels that shall show compliance with the City of Cupertino's noise ordinance (if applicable), and a structural analysis study to demonstrate that the existing pole or a new pole will adequately support all proposed equipment. If a Pole Availability Request was not made before the initial encroachment permit application submittal, the applicant shall submit information regarding site preferences (per Attachment C) at this time.
45. Notification Process - After the Public Works Department reviews and supports the ~~wireless communications facility placement location and layout~~ initial encroachment permit application submittal, the Applicant will mail courtesy letters to all residents within ~~300~~ 500 feet of the facility.
56. Response to Inquiries - Applicant will provide a Community Liaison to act as a point of contact for notified property owners. The Community Liaison will retain

an ~~inquiry report~~ log of all inquiries received and the disposition of each. Applicant will respond to all customer inquiries within ~~48~~ 72 hours. Customer concerns will be identified and reviewed by Applicant's ~~Construction~~ construction & and E ~~Engineering~~ engineering staff.

~~67.~~ Inquiry Report - Applicant will provide a report to the City detailing all customer inquiries. The information will include customer name, date of receipt, date of response, contact information and resolution. Public Works will review inquiries from residents and will provide recommended actions for the Applicant to ~~follow~~ incorporate. These actions may consist of revising the proposed wireless communications facility location or scope, re-notifying affected residents of modifications to facilities and/or requesting installation of additional screening for facilities.

~~78.~~ Final Encroachment Permit Application Submittal – When the notification process and subsequent rectification has been completed to the satisfaction of the City Engineer, the Applicant will submit a complete application package to the Public Works Department that addresses the City Engineer's comments and concerns. Once all requirements have been addressed, and permit fees have been paid, the Public Works Department will issue the necessary permits to the applicant.

~~89.~~ Construction Notices – The Applicant will have a door hanger delivered to residents affected by construction of the facilities after the necessary permits have been issued, and at least 1 week prior to commencement of construction.

~~910.~~ Post-Construction Activation – After ~~the a~~ wireless communications facility has been constructed, and within 30 days of activation, the Applicant will be required to measure, record ~~and report on~~ the emissions from the facility. ~~The An~~ Activation Report shall be provided which verify-certifies whether or not whether the equipment is complying in compliance ~~within the acceptable emission limits~~ as established ~~by FCC standards~~ emissions limits and/or other relevant government agencies.

### **Policies and Requirements:**

These guidelines are meant to provide a general overview of the procedures and requirements for installation of wireless telecommunications facilities on City-owned poles located within the public right of way. Additional conditions, information and/or procedures may be necessary based on the circumstances, project scope and the location being proposed by the Applicant, or as deemed necessary by the City Engineer.

The Applicant or its successors shall comply fully with all conditions specified in these guidelines, ~~or~~ and as modified by the City Engineer. Failure to comply with any condition shall constitute grounds for revocation. ~~In the event that~~ If the an Activation Report includes a finding that RF emissions for the site exceed FCC Standards, the Applicant will be required to immediately cease and desist operation of the facility until such time that the violation is corrected to the satisfaction of the City Engineer.

Any carrier/provider authorized by the City Engineer to operate a specific wireless communications facility installation may assign the operation of the facility to another carrier licensed by the CPUC and FCC, ~~for that radio frequency~~ provided that such transfer is made known to the City Engineer in advance of such operation, and all conditions of approval for the subject installation are carried out by the new carrier/provider.

**Please contact the Public Works Department at (408) 777-3354, or by email at [engineering@cupertino.org](mailto:engineering@cupertino.org), with any questions or concerns regarding these guidelines.**



**ATTACHMENT A**

Information to be shown on Plans and Simulations to ensure clarity		YES	NO
1	<b>Cover Sheet</b>   Show the correct project site location on cover sheet (with a vicinity map). Indicate the street address(s) for the nearest building(s).		
2	<b>Cover Sheet</b>   Provide a clear project description describing types and numbers of equipment. Also indicate if pole will be replaced (with existing and proposed heights) or if any existing road signage is proposed to be relocated or removed.		
3	<b>Cover Sheet</b>   Provide information in a checklist format to ensure conformance by installers.		
4	<b>Site Plan</b>   Show location of the proposed pole with relation to the existing travelled way, property lines, sidewalks, structures within 20 feet of the pole, and other surface equipment/facilities.		
5	<b>Site Plan</b>   Show location of any new vaults proposed.		
6	<b>Elevation Sheet</b>   Show location of any warning stickers. RF warning sticker shall be facing out to street and near antenna, or away from street and near antenna if no window within 50 feet.		
7	<b>Elevation Sheet</b>   Indicate height to top of pole, antenna, top and bottom of equipment enclosures.		
8	<b>Elevation Sheet</b>   Show any street signage that will be placed on the pole, and that is used to screen small cell equipment. Ensure signage and equipment are shown to scale. Relocated signage shall be placed at an elevation that is consistent with the original height of the signs.		
9	<b>Elevation Sheet</b>   Show equipment stacked together as close as possible while complying with airflow requirements.		
10	<b>Elevation Sheet</b>   Ensure other elements (e.g. NEMA, PBX or J boxes), ground bus bars, and base plate mounts are shown, if utilized.		
11	<b>Elevation Sheet</b>   Clearly show offset (distance) of equipment cabinets from pole, including the maximum offset from the pole to the outermost edge of facilities.		
12	<b>Photo Simulations</b>   Show equipment sizes, enclosures, signs and offsets correctly.		
13	<b>Photo Simulations</b>   Show RF warning stickers, if visible from given perspectives.		
14	<b>Photo Simulations</b>   Use perspectives that provide a true sense of distance to nearest residential windows or primary facades of buildings, as well as scale of the facilities.		
15	<b><u>Structural Design and Calculations</u></b>   <u>Provide analysis that shows structural adequacy of all proposed facilities including foundation, pole and equipment.</u>		

<a href="#">16</a>	<a href="#">Circuit Analysis</a>   Provide the streetlight single line diagram of the electrical network that serves the proposed pole. Plan shall show any modifications to the system that are necessary to serve adequate electrical power to the City's streetlights and small cell facilities.		
<a href="#">17</a>	<a href="#">Electrical Plans</a>   Provide an electrical and grounding diagram for the small cell facility from the service point pull box and within the pole.		
<a href="#">18</a>	<a href="#">Traffic Control Plans</a>   Plans that show traffic control to facilitate construction. Plans shall conform to the latest California MUTCD requirements.		

## **ATTACHMENT B**

<b>Site Completion Checklist</b>		<b>YES</b>	<b>NO</b>
1	<b>Spacing of Support Elements:</b> Support equipment (e.g. Disconnect Switch and Mrrus) to be clustered (vertically) as close as technically feasible on pole.		
2	<b>Logo Removal:</b> All equipment logos, other than those required by regulation (e.g. node identification of shutdown signage) shall be painted over or removed. Raised/Depressed logos/text on equipment enclosures (e.g. RRUs), if present to be sanded off, or covered with a sticker, and then painted.		
3	<b>Signage:</b> FCC mandated RF warning signage <a href="#">shall be placed as mandated by the FCC. Where no guidance is provided by the FCC, signage</a> shall face out to street when wireless facility is located in front of, or near a window. Signage shall face toward building if there are no windows present.		
4	<b>Notification:</b> 14 days prior to performing emissions testing, applicant shall inform residents of dwelling units within 100-feet and offer to perform a test in their dwelling.		
5	<b>Testing:</b> Measure and record emissions, including EMR/RF and noise.		
6	<b>Report:</b> Within 30 days of activation, applicant will submit an activation report to the Public Works Department <a href="#">that certifies the facility is operating within FCC emissions limits.</a>		

## ATTACHMENT C

### Siting Preferences:

Small cell facilities shall be located to reduce their visual and aesthetic impacts upon the surrounding public right of way and public vantage points. To accomplish this, the City prefers siting of small cell facilities that minimizes the need for multiple installations. The City also prefers placement of wireless facilities on streetlight poles that are the most distant from occupied structures.

The following Categories of sites for small cell facility installations are listed in order of preference. As described below, Category 1 sites are preferred over Category 2 sites, and small cell facilities in Category 3 sites are generally not permitted, either in Category 1 or Category 2 areas:

- 1) Category 1 (Preferred Sites) - Non-residential zoning districts
- 2) Category 2 (Less Preferred Sites) – All residential zoning districts

The following street types (as defined by the Cupertino General Plan) in residential zoning districts are listed from more preferred to less preferred for placement of small cell facilities:

- a. Boulevards and Arterials
- b. Major Collectors
- c. Minor Collectors
- d. Neighborhood Connectors
- e. Residential Streets

Where an applicant proposes a facility on a streetlight pole in a Category 2 site, the applicant shall provide documentation showing that all streetlight poles in any Category 1 site and in any more-preferred Category 2 site within 500 feet of the proposed facility are infeasible to meet the carrier's needs (e.g. proximity to signal barriers, such as trees, capacity and coverage needs, etc.). For example, a facility proposed for a Category 2.e (Residential Street) site would need to provide documentation showing that all Category 1 and Category 2.a, 2.b., 2.c, and 2.d sites within 500 feet are infeasible.

### 3) Category 3 (Least Preferred Sites) – Any zoning district

A facility shall not be permitted in a Category 3 site if non-Category 3 sites are available within 500 feet of the proposed facility, unless the applicant can provide documentation showing that a Category 3 site is the only feasible option available to address the carrier's needs.

The following locations are considered Least Preferred sites:

- a. Any installation in the right of way that would result in a facility being located closer than 15 feet to a public roadway intersection. An intersection is measured from the start of the curb radius.
- b. Any installation in the right of way that would result in a facility being located closer than 500 feet to any other small cell facility in the right of way owned by the same wireless carrier.
- c. Any installation in the right of way that would result in a facility being located closer than 20 feet to an occupied structure.
- d. Any installation in the right of way that would result in a facility being located closer than 100 feet to any public-school building.
- e. Any installation in the right of way that would result in a facility being located closer than 100 feet to any publicly assessable playground. For purposes of this guideline, playground shall mean an improved outdoor area designed, equipped, and set aside for children's play that is not intended for use as an athletic playing field or athletic court, and shall include any playground equipment, fall zones, surface materials, access ramps, and all areas within and including the designated enclosure and barriers.

Wireless Communication Facilities on City Owned Poles

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