City of Hemet Small Wireless Facility Design Guidelines

April 15, 2019

SMALL WIRELESS FACILITIES IN THE RIGHT-OF-WAY

DESIGN GUIDELINES

A. <u>Purpose and Applicability</u>. The purpose of these Small Wireless Facilities (SWF) Design Guidelines are to assist applicants with preparing design plans for the deployment of SWF in the right-of-way in the City of Hemet. SWF are defined as wireless installations no larger than 3 cubic feet for the antenna and 28 cubic feet for wireless equipment associated with the antenna. The guidelines govern all SWF deployment in the public right-of-way. These guidelines will be used to evaluate permit applications, and these guidelines may be updated periodically by the Engineering / Public Works Director to keep pace with fast-evolving technology.

B. <u>Goals</u>.

- 1. Encourage strategically placed to not interfere with other carriers or city owned devices, but not restrict, placement of wireless Infrastructure to publicly-used or owned sites, and in commercial and industrial zones.
- 2. Select locations away from windows, avoiding historic/architecturally significant buildings, or locations that would substantially obstruct significant views when feasible.
- 3. Design Infrastructure to be aesthetically compatible and respectful of the neighborhood aesthetic character.
- 4. Conceal wireless Infrastructure in existing structures when possible, or otherwise apply stealth, camouflage, and screening techniques to hide or blend them into the surrounding environment.
- 5. Conceal mechanical equipment and devices associated with wireless Infrastructure.
- **C.** <u>Location Preferences</u>. The City of Hemet has established the following parameters for appropriate SWF site selection in order to mitigate against adverse visual, noise and aesthetic impacts.
 - 1. Co-location on existing Infrastructure is preferred over the installation of new Infrastructure.
 - 2. SWF should be sited along arterial roads, whenever feasible. Placement along residential roads should be avoided.
- D. <u>Design Guidelines</u>. Any attachment to an existing structure shall be designed by a registered Engineer. This design shall include weight of equipment, wind loading (power) load calculations. The Communications Company is responsible for any and all power upgrades at no cost to the City of Hemet.

1. Universal Guidelines for All SWF:

- a. SWF shall utilize the smallest, least visually intrusive antennas, components, and other necessary equipment available at the time of installation.
- b. Use all reasonable means to conceal the SWF through integration with existing structures and landscaping.
- c. All equipment, antennas, poles, cables, hardware, and towers shall have a non-reflective finish and shall be painted or otherwise treated to match their surroundings.
- d. All SWF shall comply with City-adopted noise standards.
- e. No advertising or signs, other than necessary provider identification signs and warning signs, shall be allowed on or at the location of a wireless telecommunications facility. Radio-frequency (RF) warning labels, Node ID stickers, and other required identification labels should be the smallest possible and lowest visibility. Remove or cover colored equipment manufacturer decals and logos not required by government regulation.
- f. Ensure plans and photo simulations submitted for City plan review accurately show smaller equipment items such as duplexers, ground buss bars, PBX or J-Boxes. Hide these elements in locations such as behind equipment enclosures.
- 2. <u>Guidelines for Vertical Installations</u>. This section addresses pole-mounted Infrastructure installations in the public right-of-way.
 - a. Use pole-mounted equipment enclosures that are nearly the same width as the pole, even if they need to be slightly longer as a result. Narrow enclosures are less likely to impair views of buildings and scenic resources or to detract from streetscapes.
 - b. Structures should be architecturally integrated into environment and harmonize with the property on which it is proposed. Design structures to the minimum height necessary.
 - c. Antennas mounted on such structures as light standards should be painted to blend into the structure.
 - d. For new poles, including existing poles that are replaced to support the SWF, incorporate any cabling and conduits into the pole itself, a barrier in pole shall be used. On existing poles, use shrouds, risers or conduit, to reduce the appearance of cluttered or tangled cabling. In some instances, installation practices such as using equipment enclosures with specific port locations, or crossing wires below a down- facing port on an equipment enclosure, can reduce the likelihood that cabling will appear cluttered or bend outward from the pole and further away from the enclosure. We want to

minimize the foot print on poles. Minimum size conduit to be used. Conduits running alongside street lighting poles from the ground to equipment is not recommend. Attachment of conduit(s) and equipment will need to be addressed.

- e. Small Wireless Facilities co-located on street lights:
 - 1) Limit installation to one radome antenna at the top of the light standard with one equipment cabinet mounted directly on the pole. All antennas shall be concealed inside the radome with a diameter similar to the pole itself, but in no case should the radome be more than eighteen (18") inches in diameter.
 - When mounted on street lights, the antennas/radome enclosures should be mounted above the light source, but the antenna/radome should extend no higher than four (4) feet above the height of the existing pole.
 - 3) Mount pole-mounted equipment directly behind any road signs located on a pole, if possible and distance from ground meets all height clearance regulations.
 - 4) Minimum height clearance regulations shall be observed by all components of the installation.

Examples of Preferred Designs



- 5) All cables shall be concealed within a sleeve between the bottom of the antenna and the mounting bracket. All cables and conduit to and from the light standard is expected to be routed from underneath the caisson.
- 6) Stack equipment close together and on the same side of the pole. If a long rectangular disconnect switch is used, rotate the enclosure so the elements can be stacked closer together on the pole.
- 7) All replacement or new poles must comply with all applicable City regulations and policies. City of Hemet Standard Specifications for Public Works, Sections G-808 and the Scenic Highway Setback Manual Design Criteria. The new or replacement poles will be reviewed to match design, height, color and material of the original or adjacent poles.
- 8) Decorative/historic-themed light poles in Hemet have historical significance and should be avoided. The City Engineer / Public Works Director may review the requests for siting near or on a decorative light pole on a case-by-case basis.
- 9) All disturbed landscape shall be replaced in-kind and areas of bare or disturbed soil must be revegetated in accordance with City landscape requirements.

3. <u>Guidelines for Distribution Poles.</u> For distribution poles, the majority of electric distribution poles are jointly owned. Third Party use of jointly-owned poles requires the consent of all joint-owners. The City of Hemet may not unilaterally authorize the use of a jointly-owned pole. The Applicant is solely responsible for obtaining any and all consents, permits, licenses or grants necessary for making attachments to the selected poles prior to application.

A. <u>General</u>

- 1. Small wireless facility attachments will be permitted in the telecommunications space of utility poles.
- 2. The City's first preference to locate Small Wireless Facilities will be on cityowned non-decorative street light poles first over distribution poles, but understands that it is not always feasible or reasonable.
- 3. The Applicant is responsible for obtaining power through Southern California Edison.
- 4. Service through Southern California Edison will be a non-metered service when feasible. Any meter pedestal must be preapproved by the Director.

- 5. All Attachments on distribution poles must meet requirements in California Public Utilities General Order 95.
- 6. All equipment shall be removed and relocated if the City decides to underground the utility lines in the future, at the cost allocations dictated by the CPUC for the type of undergrounding project it is. The equipment must be relocated within the timeframe dictated by the CPUC for the project."
- 7. All installations shall be consistent with General Order 95, "Rules for Overhead Electric Line Construction," of the California Public Utilities Commission, and all other applicable Federal, State, and local orders, codes, rules, and regulations.

B. <u>Electrical Requirements</u>

- 1. For underground service, Applicants will be responsible for installing all necessary substructure and service cables from a SCE designated service point.
- 2. All Small Wireless Facility installations must be equipped with an appropriate visible disconnect means (switch) that is clearly identified.

C. <u>Electrical Requirements</u>

- 1. Justification for a new structure must be provided and preapproved by the Director. Additionally, all designs must be preapproved by the Director prior to application being submitted.
- 2. Any poles added for telecommunication shall have street light attached powered by the Communication carrier, but the light only will be maintained by the City. New installation shall meet all City of Hemet requirements. If a carrier abandons a site it shall be turned over to the city at no cost.