



CITY COUNCIL AGENDA STATEMENT



January 8, 2019

File ID: 18-0598

TITLE

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ADOPTING DESIGN STANDARDS FOR SMALL WIRELESS FACILITIES WITHIN THE CITY'S RIGHT-OF-WAY

RECOMMENDED ACTION

Council adopt the resolution.

SUMMARY

The growth in personal wireless services coupled with consumers needs for more data capacity and faster speeds have created an increased demand for new wireless antennas and equipment. Existing 3 and 4 Generation (G) wireless technology was primarily deployed using macro cell sites installed on large cell towers. These macro sites allow for a greater coverage area, but have limited capacity. Increased usage of cellular data functions has subsequently increased the demand for greater capacity on cellular networks. To provide higher bandwidth signals and extend coverage for more users, the next phase of cellular technology, 5G, will use a small cell concept. These small cell deployments are significantly smaller than the previously built macro cell sites and have a more limited range by serving only users within the immediate proximity. As a result, the telecommunications industry is planning for a far greater density of small cell sites.

Wireless service providers are proposing to install small cell equipment in outdoor applications on City-owned poles and City-owned street lights located in City Right-of-Way to provide faster data coverage and capacity for mobile phones and other cellular devices. To facilitate the installation of this technology and maintain acceptable aesthetics of the City's streetscape, City staff is proposing the provisions within the attached resolution to regulate the design standards for small cell sites and to preserve and maintain local control over these telecommunications facilities. Per a recent Federal Communications Commission (FCC) ruling, aesthetic regulations imposed by a municipality are permissible providing that they are reasonable, no more burdensome than those applied to other types of infrastructure deployments and are published in advance.

ENVIRONMENTAL REVIEW

The proposed activity has been reviewed for compliance with the California Environmental Quality Act (CEQA) and it has been determined that the activity is not a "Project" as defined under Section 15378 of the state CEQA Guidelines; therefore, pursuant to Section 15060(c)(3) of the State CEQA Guidelines, the activity is not subject to CEQA. Although environmental review is not required at this time, once the scope of

potential project(s) has been defined, environmental review will be required for each project and the appropriate environmental determination will be made. Notwithstanding the foregoing, it has also been determined that the activity qualifies for an Exemption pursuant to Section 15061(b)(3) of the California Environmental Quality Act State Guidelines. Thus, no environmental review is required.

BOARD/COMMISSION/COMMITTEE RECOMMENDATION

Not applicable.

DISCUSSION

Wireless telecommunications facilities are regulated by federal, state and local laws. Over the last few decades, legislation at the federal and state levels have been proposed and implemented to strip municipalities of their local zoning and permitting authority regarding the regulation of telecommunications facilities. A brief overview of the most notable acts and their implications is provided below.

Telecommunications Act

Federal law significantly limits the city's ability to regulate telecommunication facilities. Under the Telecommunications Act of 1996, a city cannot prohibit the provision of wireless service or unreasonably discriminate among wireless service providers. Also, under federal law, the city may not regulate the placement, construction or modification of wireless communications facilities on the basis of radio frequency emissions, so long as the facilities comply with the FCC regulations concerning such emissions. Despite federal limitations, cities historically have retained the ability to regulate the aesthetic of wireless facilities, including factors such as height and property line setbacks. However, federal law developments continue to erode that ability thereby reducing local control.

The Spectrum Act

In 2012, Congress enacted the Middle Class Tax Relief and Job Creation Act (The Spectrum Act of 2012). The Spectrum Act was intended to facilitate the telecommunication industry's rapid deployment of 3G and 4G wireless infrastructure by requiring local governments to approve any application that sought to modify an existing wireless telecommunication facility that does not "substantially change" the existing facility. The Spectrum Act itself contains no specific definitions, but in 2015, the FCC promulgated regulations containing definitions, processing requirements, timelines and remedies for applications that seek to modify an existing wireless telecommunication facility in accordance with the Spectrum Act. These FCC rules are binding on local governments. Most significantly for cities, the federal regulations established very short permit processing timelines, referred to as "shot clocks," of 60, 90 and 150 days depending on the type of facility.

September 26, 2018 FCC Ruling

On September 26, 2018, the FCC issued a ruling designed to further promote the expeditious deployment of small cell sites in the public ROW. This ruling was initially scheduled to take effect on January 14, 2019; however, that deadline was recently extended to April 15, 2019. The recent FCC ruling applies to all small wireless facilities defined as follows: Small wireless facility . . . is a facility that meets each of the following conditions:

1. The structure on which antenna facilities are mounted—
 - a. Is 50 feet or less in height, or
 - b. Is no more than 10 percent taller than other adjacent structures, or
 - c. Is not extended to a height of more than 10 percent above its preexisting height as a result of the collocation of new antenna facilities; and
2. Each antenna (excluding associated antenna equipment) is no more than three (3) cubic feet in volume; and
3. All antenna equipment associated with the facility (excluding antennas) are cumulatively no more than 28 cubic feet in volume; and
4. The facility does not require antenna structure registration under part 17 of this chapter;
5. The facility is not located on Tribal lands; and
6. The facility does not result in human exposure to radio frequency radiation in excess of the applicable safety standards specified in federal law.

The recent FCC ruling establishes the following new standards for small wireless facilities:

- *Broad interpretation of local prohibitions:* The FCC order attempts to further limit the city’s ability to adopt a regulation that “materially limits or inhibits the ability of wireless carriers.”
- *Cost-based fees:* The FCC ruled that cities are limited to charging fees that are no greater than a “reasonable approximation” of their costs for processing applications and for managing deployments in the right of way. The FCC established a presumptively lawful, nationwide fee schedule for small cell applications as follows:
 - \$500 for a single up-front application that includes up to five (5) small wireless facilities, with an additional \$100 for each small wireless facility beyond five, or \$1,000 for non-recurring fees for a new pole to support one or more small wireless facilities;
 - \$270 per small wireless facility per year for all recurring fees, including any possible ROW access fee or fee for attachment to city-owned poles in the ROW.
- *Aesthetic regulations:* These are not preempted if they are (1) reasonable, (2) no more burdensome than those applied to other types of infrastructure deployments and (3) published in advance.
- *Underground requirements:* The FCC ruled that a requirement that all wireless facilities be deployed underground would amount to an effective prohibition and is thus not permitted.
- *Quid Pro Quo “in kind service”:* The FCC discouraged situations where the city makes clear it will approve a deployment only on condition that the provider supply an “in-kind” service or public benefit, such as installing a communications network dedicated to city’s exclusive use.
- *Batched applications:* Cities cannot prohibit batched applications (e.g., multiple street lights.) It is expected that the city will receive dozens of poles attachment requests in a single application.

In addition, the recent FCC ruling established a new set of even more restrictive “shot clocks” applicable only to small wireless facilities. These shot clocks are:

- Sixty (60) days for small cell wireless facility attachments to existing poles or structures; and
- Ninety (90) days for small cell wireless facilities on new poles or structures.

Because the ruling significantly encroaches on cities' abilities to manage their own ROW, it is likely to be legally challenged. However, this ruling will continue to apply to cities unless and until a court issues an injunction against the ruling.

Proposed Design Standards

By Resolution of the City Council, staff is proposing adoption of design standards for small cell telecommunications facilities in the public Right-of-Way. The purpose of the proposed standards is to provide guidance and consistency in the design of wireless telecommunication facilities. It does not dictate specific requirements but illustrates the desired level of design quality and configuration for any proposed wireless telecommunication facility including factors such as location, material and color, and form and placement. The below standards are intended to be applicable for all poles including street light poles and power poles within the City's Right-of-Way. **Approval of deviations from the design standards shall require the applicant to demonstrate that the proposal is the least visually intrusive design and location feasible and is necessary to close gaps in coverage.**

Location:

1. Siting: Preferred location is within non-residential neighborhoods (500 feet away from residential zones). Should the location be within a residential neighborhood, reasonable efforts shall be made to ensure that the facility is not in direct view of residential living areas such as living rooms, bedrooms, etc.
 - a. Within 500 feet of a residential zone, noise limit from any small cell facility shall be 5dBA above ambient sound, not to exceed 30 dBA as measured at the property line. Other federal, state or city noise regulations may apply.
2. Small cell facilities shall not be installed on electrical/electronic traffic control devices' poles/hardware such as traffic signals, pedestrian hybrid beacons (formerly known as HAWK), Rectangular Rapid Flashing Beacons (RRFB), and flashing beacons.
3. All equipment located within the City's ROW shall be located such that it meets ADA requirements and does not obstruct, impede, or hinder usual pedestrian or vehicular travel or interfere with the operation and maintenance of street lights, signage, street furniture, fire hydrants, other street appurtenances, or business district maintenance.
4. Provide appropriate clearance from existing utilities.

Facility and Support Equipment:

5. Wireless facilities should be placed within an enclosure and concealed from view to the maximum extent possible.
6. Radiation certified to be at safe levels by a non-ionizing radiation electromagnetic radiation report (NIER) shall be submitted to the City and retained on file for equipment type and model.
7. NIER report shall be endorsed by a qualified professional. It shall specify minimum approach distances to the general public as well as electrical and communication workers that are not trained for working in an RF environment when accessing the pole by climbing, ladder or bucket.
8. A "disconnect" shall be provided for both the power and the cell signal that be easily accessed and operated by street lighting maintenance personnel.

9. Wireless facilities should be designed, textured and painted to match existing pole to reduce visual clutter.
10. "ABC": Antennas, brackets (mounting) and cabling should all have a uniform paint color and be painted to match the color of the equipment, including the fiber termination enclosure.

Form and Placement:

11. Narrow Vertical Alignment: Consider the use of shrouds and equipment enclosures that are nearly the same diameter as the post at a ratio of approximately 1:1 such that it reads as one contiguous streamlined form from the street level. Avoid any tilted arrangement(s).
12. Antenna and Remote Radio Unit (RRU):
 - a. Consider using antenna designs that provide robust coverage without appearing more distracting than necessary. Avoid placements that may impair light, air, or views from adjacent windows.
 - b. Antennas should be generally cylindrical or rectangular in shape.
 - c. Place antenna and RRUs within the shroud above the pole. RRUs attached to the side of the pole are discouraged; but if required, it shall use the smallest RRU volume possible and be stacked vertically and close together with minimal distance from the pole.
 - d. Equipment should be secured by using steel/aluminum banding and not through bolting/drilling into pole. Drilling into an existing street light pole generally voids the pole's warranty.
 - e. The height of a wireless facility shall be the lesser of the minimum height needed for the operation or, for a pole that has a collocated facility, 50 feet not including the antenna height.
 - f. 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. Avoid wide offsets (more than 4 inches) of equipment enclosure brackets from the pole.
 - g. All equipment height shall be above the ground at least 8 feet. If the small cell equipment orients toward the street, the attachment shall be installed no less than 16 feet above the ground.
13. Wires and Cables: Wires and cables are to be contained within the shroud and placed inside the pole in order to reduce the appearance of cluttered or tangled cabling. Cabling and meters should be inside the pole to the maximum extent possible. When feasible, provider may use existing City conduit(s) between City pull box and City street light pole/other pole to install small cell facility wiring.
14. Signage and Lights:
 - a. Signage and lights are limited to what may be required by the FAA or FCC.
 - b. Use the smallest and lowest visibility signs, including the radio-frequency warning sticker required by government or electric utility regulations, and placed as close to the antenna as possible.
 - c. Use equipment that does not feature flashing lights that may be visible to the public.
15. Electrical Meters: A separate meter must be provided for small cell facility. Electrical meters should be located on, within the pole or underground. In the case pole owner prohibits the use of a pole-

mounted meter, and an above ground power meter box is required, then the meter box must be of the smallest footprint available and be approved by the City Engineer or designee.

16. Utility Box: Reasonable efforts must be made by provider to avoid the use of above ground utility boxes. If above ground utility boxes must be used, then they shall:
 - a. Use the smallest footprint and not exceed 48-inches in height and 30-inches in width/depth.
 - b. Be secured to a concrete pad or pole.
 - c. Deviations from these standards must be approved by City Engineer or designee.
17. Pole Height: Overall height of the pole shall be similar to the surrounding poles and/or not exceed 35 feet in height.

Ancillary Equipment:

18. Ensure plans and photo simulations 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 or in mounting arms which feature recessed areas.

New Stand-alone Utility Pole Design Standards:

19. The new pole must match the aesthetic of existing street light/poles adjacent to the new pole.
20. The pole shall be visually pleasing, meaning:
 - a. Any transition between an equipment cabinet at the base of the pole and the upper pole should have a proper transition.
 - b. The equipment cabinet at the base of the pole shall not be larger than 28 cubic feet in size.
 - c. Upper pole shall be scaled to 0.5 to 0.75 the size of the cabinet but not larger than 10 inches at the widest portion.
 - d. All hardware connections, including those between the cabinet and upper pole, shall be concealed from view. No horizontal flat spaces greater than 1.5 inches shall exist on the equipment cabinet to prevent placement of cups, trash, or other objects.

Placement of New Stand-alone Utility Poles:

21. The placement of new stand-alone utility poles shall be in accordance with the below standards:
 - a. New utility poles shall be at least 10 feet from the triangle extension of an alleyway flare.
 - b. Shall not be located within 100 feet of the apron of a fire station or other adjacent emergency service facility.
 - c. Shall not impede or obstruct usual pedestrian or vehicular travel
 - d. Shall be located at intersecting property lines when possible.
 - e. Shall be located on secondary streets, when possible.
 - f. Shall be located at least 15 feet away from trees or outside of the drip line of the tree to prevent root disturbance.
 - g. Shall be located at least 5 feet away from the widest point of a drive approach.
 - h. Shall be located at least 50 feet from an existing electrical/electronic traffic control device.
 - i. No physical, electrical, or radio interference by the small cell shall be permitted.
 - ii. If required by the City, the provider will provide analysis that the proposed small cell shall not cause any interference with the City public safety radio system,

electrical/electronic traffic control devices, emergency signal control devices, “smart city” applications, or other City communications or electronic components.

- i. When located adjacent to a commercial establishment, reasonable efforts should be made to ensure that the facility is not in direct view of businesses’ main entrance, picture windows or other large openings including, but not limited to sliding glass doors or openings that create an indoor-outdoor dining experience.

Decorative Pole Placement:

22. Decorative poles, defined as a pole that is specially designed and placed for an aesthetic purpose, may be replaced by a wireless provider for the purpose of collocation if the replacement pole reasonably conforms to the design aesthetic of the displaced pole.
23. The design shall be approved by the City Engineer or designee.

Photo Simulations:

24. Ensure that all photo simulations appear realistic with respect to cabling/conduit, the RF warning and node ID stickers, and equipment offset from the pole. Verify whether a GPS antenna is needed; as submittals often feature (macro-sized) GPS antennas on simulations when none are shown on plans or needed.
25. If the existing pole is leaning and slated for replacement, the simulation should show a new upright pole.
26. Ensure photo simulations accurately show the offset of equipment cabinets from the pole. Many simulations depict flush-mounted installations when the actual site features a significant offset from the pole.

DECISION-MAKER CONFLICT

Staff has reviewed the decision contemplated by this action and has determined that it is not site-specific and consequently, the 500-foot rule found in California Code of Regulations Title 2, section 18702.2(a)(11), is not applicable to this decision for purposes of determining a disqualifying real property-related financial conflict of interest under the Political Reform Act (Cal. Gov’t Code § 87100, et seq.).

Staff is not independently aware and has not been informed by any City Council member, of any other fact that may constitute a basis for a decision maker conflict of interest in this matter.

LINK TO STRATEGIC GOALS

The City’s Strategic Plan has five major goals: Operational Excellence, Economic Vitality, Healthy Community, Strong and Secure Neighborhoods and a Connected Community. The resolution supports the Economic Vitality Goal as the use of safe and secure access to data can help promote an environment for residents and businesses to prosper in. The goals of Strong and Secure Neighborhoods and Connected Community are also linked to this resolution as it will ensure the future installation of this technology will maintain acceptable aesthetics within the City’s streetscape.

CURRENT-YEAR FISCAL IMPACT

There is no current-year fiscal impact to the City’s General Fund as a result of approving this resolution.

ONGOING FISCAL IMPACT

There is no ongoing fiscal impact to the City’s General Fund as the competitive local exchange carriers will have the responsibility to construct, manage and maintain the small cell wireless facilities.

ATTACHMENTS

1. Proposed Design Standards

Staff Contact: Miranda Evans, Economic Development Specialist