

DESIGN GUIDELINES FOR SMALL WIRELESS FACILITIES

SECTION 1. PREFERRED STRUCTURES AND LOCATIONS

- (a) **Rule: Preferred Support Structures and Locations:** Compliance with this subsection (a) will occur if all requirements of subsection (3) of this subsection (a) are met and, for any structure proposed under subsection (a)(1) and any location proposed for subsection (a)(2), the Director determines that the applicant has demonstrated with clear and convincing evidence in the written record that each more-preferred structure and location within 750 feet of the proposed installation are “technically infeasible” as the term is used in section 19-15 of the Code. In the event of any conflict between obtaining a higher priority in subsection (a)(1) versus (a)(2), satisfying the location preferences in subsection (a)(2) shall be preferred. The Director shall not consider claims of an “effective prohibition” when making this determination of whether a structure or location is “feasible.”
- (1) **Support Structure Hierarchy.** The following is the City’s required hierarchy for support structures for small wireless facilities in the public rights-of-way, ordered from most preferred to least preferred:
- (A) existing or new replacement light standards;
 - (B) existing or new replacement City traffic signal poles;
 - (C) existing or new replacement utility poles;
 - (D) new camouflaged standalone poles;
 - (E) any other types of poles the Director determines meets the purposes of these Guidelines.
- (2) **Location Hierarchy.** The following is the City’s required hierarchy for locations for small wireless facilities in the public rights-of-way, ordered from most preferred to least preferred:
- (A) *Non-Residential Districts.*
 - (i) locations within, or immediately adjacent to, districts where residential uses are not permitted uses (e.g. industrial, commercial and industrial districts with no residential overlay) on or along major, primary or secondary arterials;
 - (ii) locations within, or immediately adjacent to, districts where residential uses are not permitted on or along divided collector arterials or collector arterials;
 - (iii) locations within, or immediately adjacent to, districts where residential uses are not permitted uses on or along local streets;
 - (B) *Residential Overlay Districts*

- (i) locations within, or immediately adjacent to, districts where residential uses would be prohibited but for an overlay district, on or along major, primary or secondary arterials;
 - (ii) locations within, or immediately adjacent to, districts where residential uses would be prohibited but for an overlay district, on or along divided collector arterials or collector arterials;
 - (iii) locations within, or immediately adjacent to, districts where residential uses would be prohibited but for an overlay district, on or along local streets;
- (C) *Residential Districts and Schools*
- (i) locations within, or immediately adjacent to, districts where residential uses are permitted uses on or along major, primary or secondary arterials;
 - (ii) locations within, or immediately adjacent to, districts where residential uses are permitted uses on or along divided collector arterials or collector arterials;
 - (iii) locations (a) within, or immediately adjacent to, districts where residential uses are permitted uses on or along local streets, or (b) immediately adjacent to a a day care, primary or secondary school.
- (3) **Additional Location Requirements.** The City also requires small wireless facilities in the public rights-of-way to be installed as follows.
- (A) *Setback from dwellings.* Small wireless facilities, regardless of zone, shall not be within 25 feet of any lawful dwelling unit nor within a distance equal to the total height of the pole plus the wireless facility.
 - (B) *Sight Distance Triangles.* New or new replacement poles (excluding street traffic light poles) shall not be placed within any sight distance triangles at any intersections.
 - (C) *Setbacks from Driveways.* New or new replacement poles, regardless of zone, must be placed at least 10 feet away from any driveway, and at least 50 feet from any driveways for schools, police stations, fire stations or other public or private emergency responder facilities.
 - (D) *Near Property Lines.* New or new replacement poles regardless of zone, shall be placed as close as feasible and in no event more than five feet of a property line between two parcels that abut the public right of way.
 - (E) *Historic Structures or Public Art.* New poles (including replacement poles) shall not be installed within 100 feet of designated historic structures or local landmarks or public art.
 - (F) *Facility Distance.* Facilities of the same company shall not be located within seven hundred fifty (750) feet of each other. Facilities shall not be within two hundred fifty (250) feet of any another facility of a different provider unless both facilities are located either in a commercial or industrial zone.

- (b) **Prohibited Support Structures.** Small wireless facilities shall not be permitted on the following:
- (1) existing decorative poles; or
 - (2) any utility pole scheduled for removal or relocation within 18 months from the time the Director acts on the wireless application; or
 - (3) strands or wires between any structures.
- (c) **Encroachments Over Private Property.** No small wireless antennas, accessory equipment or other improvements may encroach onto or over any private or other property outside the public rights-of-way without the property owner's express written consent.
- (d) **No Interference with Other Uses.** Small wireless facilities and any associated antennas, accessory equipment or improvements shall not be located in any place or manner that would physically interfere with or impede access to any: (1) worker access to any above-ground or underground infrastructure for traffic control, streetlight or public transportation, including without limitation any curb control sign, parking meter, vehicular traffic sign or signal, pedestrian traffic sign or signal, barricade reflectors; (2) access to any public transportation vehicles, shelters, street furniture or other improvements at any public transportation stop; (3) worker access to above-ground or underground infrastructure owned or operated by any public or private utility agency; (4) fire hydrant or water valve; (5) access to any doors, gates, sidewalk doors, passage doors, stoops or other ingress and egress points to any building appurtenant to the rights-of-way; or (6) access to any fire escape.
- (e) **Replacement Poles.** All replacement poles must: (1) be located as close to the removed pole as possible, no more than four feet to the extent feasible; (2) be aligned with the other existing poles along the public rights-of-way; (3) maintain the prior-existing street light illumination pattern; and (4) be compliant with all applicable standards and specifications by the city engineer or his or her designee.

SECTION 2. DESIGN STANDARDS

- (a) **Finishes.** All exterior surfaces shall be painted, colored and/or wrapped in flat, nonreflective hues that match the underlying support structure or blend with the surrounding environment. All finishes shall be subject to the Director's prior approval.
- (b) **Noise.** Small wireless facilities and all associated antennas, accessory equipment and other improvements must comply individually and cumulatively

with the requirements of Chapter XIII of Article 13 of the Municipal Code (Section 13-277 *et seq.* (“Noise Control”)), as may be amended.

- (c) **Lights.** All lights and light fixtures must be aimed and shielded so that their illumination effects are directed downwards and confined within the public rights-of-way in a manner consistent with any other standards and specifications by the city engineer or his or her designee. All antennas, accessory equipment and other improvements with indicator or status lights must be installed in locations and within enclosures that mitigate illumination impacts visible from publicly accessible areas.
- (d) **Trees and Landscaping.** Small wireless facilities and other infrastructure deployments shall not be installed (in whole or in part) within any tree drip line. No tree may be altered, removed or replaced unless such alteration, removal or replacement is approved by the City consistent with Chapter V (“Parkway Trees”, § 15-124 *et seq.*) of Title 15 of the Costa Mesa Municipal Code. Small wireless facilities and other infrastructure deployments shall not cause the removal of city installed landscaping except to the minimum extent necessary to allow the pole and related infrastructure and all other landscaping shall not be replaced with concrete.
- (e) **Signs and Advertisements.** All small wireless facilities and other infrastructure deployments that involve RF transmitters must include signage that accurately identifies the site owner/operator, the owner/operator’s site name or identification number and a toll-free number to the owner/operator’s network operations center. Small wireless facilities and other infrastructure deployments may not bear any other signage or advertisements unless expressly approved by the City, required by law or recommended under FCC or other United States governmental agencies for compliance with RF emissions regulations. Signs shall be no larger than required or recommended by FCC or other United States governmental regulations.
- (f) **Site Security Measures.** Small wireless facilities and other infrastructure deployments may incorporate reasonable and appropriate site security measures, such as locks and anti-climbing devices, to prevent unauthorized access, theft or vandalism.
- (g) **Compliance with Health and Safety Regulations.** All small wireless facilities and other infrastructure deployments shall be designed, constructed, operated and maintained in compliance with all generally applicable health and safety regulations, which includes without limitation all applicable regulations for human exposure to RF emissions and compliance with the federal Americans with Disabilities Act of 1990 (42 U.S.C. §§ 12101 *et seq.*) and similar laws.
- (h) **Antennas.** The provisions in this subsection (h) apply to all antennas.

- (1) **Shrouding.** All antennas, radio transmission equipment (e.g., radio remote units or “RRUs”), and associated cables, jumpers, wires, mounts, masts, brackets and other connectors and hardware, must be installed within a single shroud or radome or within the pole.
 - (A) Pole-Top Mounted. The shroud height for a pole-top mounted facility shall not exceed 66 inches and the shroud width shall not exceed 120% percent of the pole diameter. The pole must be uniform in diameter. Unless it is infeasible to do so, or would otherwise violate another city requirement, all small wireless facilities on utility poles shall be pole-top mounted.
 - (B) Side-Mounted. If a small wireless facility on a utility pole cannot be pole-top mounted, it shall be side mounted. The total volume of a shroud for a side mounted facility shall not exceed six cubic feet, and the greatest distance between two points on the shroud shall not exceed 4 feet. Side-mounted antennas shall not project: (i) more than 24 inches from the support structure; or (ii) over any abutting private property. If applicable laws require a configuration different than specified herein, configuration shall be no greater than required for compliance with such laws.
- (2) **Overall Height.** No antenna may extend more than five feet above the support structure, plus any minimum separation between the antenna and other pole attachments required by applicable health and safety regulations. The overall height of a replacement or new pole shall not exceed the height of adjacent poles of like kind or 35 feet, whichever is more restrictive.
 - (i) **Undergrounded Accessory Equipment.**
 - (1) **Undergrounding.** Accessory equipment (other than any emergency disconnect switches) shall be placed underground. Notwithstanding the preceding sentence, the Director may grant an exception when the applicant demonstrates by clear and convincing evidence that compliance with this section would be technically infeasible.
 - (2) **Vaults.** All accessory equipment must be installed within the sidewalk in a flush to grade underground vault that is load-rated to meet ADA and City standards. Pull boxes must be installed with approved traffic lids. Underground vaults must be constructed with a slip-resistant cover.
 - (j) **Utilities.** The provisions in this subsection (j) are applicable to all utilities and other related improvements that serve small wireless facilities and other infrastructure deployments.
 - (1) **Vertical Cable Risers.** All cables, wires and other connectors must be routed through conduits within the pole or other support structure, and all conduit attachments, cables, wires and other connectors must be concealed from public view. To the extent that cables, wires and other connectors cannot be

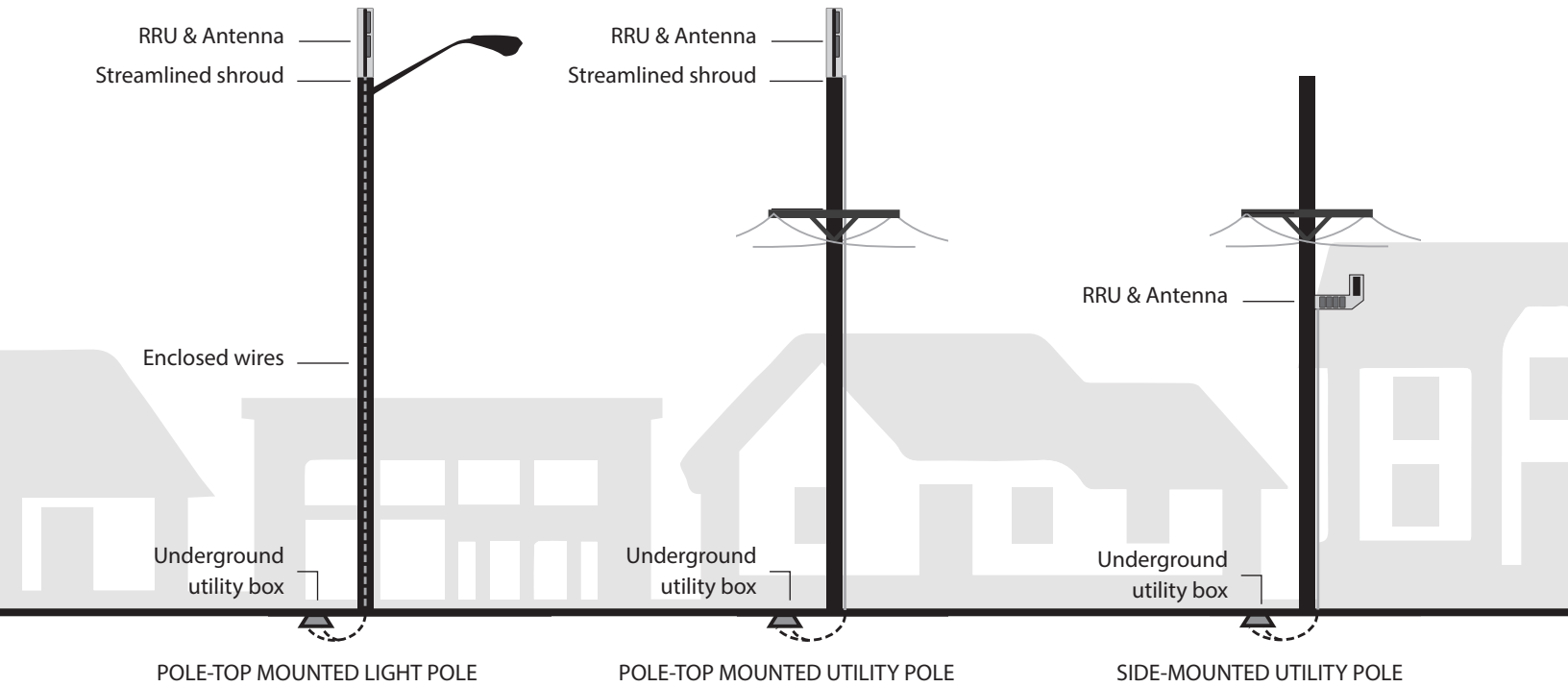
routed through the pole, such as with wood utility poles, applicants shall route them through a single external conduit or shroud that has been finished to match the underlying pole.

- (2) **Spools and Coils.** To reduce clutter and deter vandalism, excess fiber optic or coaxial cables shall not be spooled, coiled or otherwise stored on the pole outside equipment cabinets or shrouds.
- (3) **Electric Meters.** Small wireless facilities and other infrastructure deployments shall use flat-rate electric service or other method that obviates the need for a separate above-grade electric meter. If flat-rate service is not available, applicants may install a shrouded smart meter; however, it is not preferred.
- (4) **Existing Conduit or Circuits.** To reduce unnecessary wear and tear on the public rights-of-way, applicants are encouraged to use existing conduits and/or electric circuits whenever available and technically feasible.



DESIGN GUIDELINES SMALL WIRELESS FACILITY

MINISTERIAL APPROVAL



DISCRETIONARY

