

MEMORANDUM

TO: City Council

FROM: Alfred D. Lott, ICMA-CM, CPM
City Manager

SUBJECT: Approval of Resolution R-20-19, the Proposed Small Wireless Facilities Design Guidelines

DATE: March 28, 2019

Per the new Federal Communications Commission's ("FCC") regulations, the City of Bowie has created Small Wireless Facilities ("SWF") Aesthetic Guidelines. The approval of Resolution R-20-19 will assure the City's compliance with these new regulations on SWF in the Public Right-of-Way.

On September 27, 2018, the FCC issued a *Declaratory Ruling and Third Report and Order in Accelerating Wireless/Wireline Broadband Deployment*, also known as the Small Cell Preemption Order. This Order preempts any previous aesthetics requirements for SWF unless they are (1) reasonable; (2) no more burdensome than those applied to other types of infrastructure deployments; (3) objective; and (4) published in advance. The FCC Order's aesthetic requirements take effect by April 15, 2019. In an effort to comply with the Order's requirements and effective date, staff has been preparing the SWF Aesthetic Guidelines.

Staff Recommendation

Due to the FCC's new regulations on Small Wireless Facilities and the City's need to be in compliance with these new regulations, the staff recommends the approval of Resolution R-20-19.

ADL/mb
Enclosures

**RESOLUTION
OF THE COUNCIL OF THE CITY OF BOWIE, MARYLAND
APPROVING THE SMALL WIRELESS FACILITIES DESIGN GUIDELINES**

WHEREAS, the City of Bowie (hereafter designated “City”) needs to be in compliance with the Federal Communications Commission’s (herein “FCC”) regulation on Small Wireless Facilities (herein “SWF”); and

WHEREAS, on September 27, 2018, the FCC issued a *Declaratory Ruling and Third Report and Order in Accelerating Wireless/Wireline Broadband Deployment* (herein “Order”); and

WHEREAS, the Order preempts any previous aesthetic requirements for SWF unless they are reasonable, no more burdensome than those applied to other types of infrastructure deployments, are objective, and are published in advanced.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Bowie, Maryland, that the Small Wireless Facilities Aesthetic Guidelines be approved as a guiding document for the deployment of Small Cell Facilities in the Public Right-of Way.

INTRODUCED AND PASSED by the Council of the City of Bowie, Maryland at a meeting on April 1, 2019.

ATTEST:

THE CITY OF BOWIE, MARYLAND

Awilda Hernandez
City Clerk

G. Frederick Robinson
Mayor

SMALL WIRELESS FACILITIES DESIGN GUIDELINES



CITY OF BOWIE

April 2019

PURPOSE

The Small Wireless Facilities (“SWF”) design guidelines are for the purpose of providing aesthetic requirements and specifications for all SWF deployment on the public right-of-way within the City of Bowie (“City”) and consistent with all applicable federal, state, and local laws. It is our purpose to meet the demands of and increase the availability and quality of wireless broadband while preserving the character of our neighborhoods and maintaining the uniqueness of our streetscape.

BOWIE DEVELOPMENT REVIEW GUIDELINES AND POLICIES

All small wireless facilities designs should be in compliance with Bowie Development Review Guidelines and Policies. These guidelines and policies are found on the City’s website.

SITE AVAILABILITY

It is the City’s preference to have SWF be co-located on an existing pole whenever technologically possible, to the extent such co-location does not have the effect of prohibiting the provision of service.

Site Availability and Approval

Preferable sites

1. Private Property
2. Retail and Commercial Area
3. Highway Rights of Way

Least preferable sites

4. Residential Areas
5. Parks
6. Historic District

SWF INSTALLATION GUIDELINES

Pole-Mounted Equipment Cages/Shrouds

When pole-mounted equipment is either permitted or required, all equipment other than the antenna(s), electric meter and disconnect switch must be concealed within an equipment shroud not to exceed eleven (11ft³) cubic feet in total volume. The equipment must be installed no lower than fifteen (15’) feet above ground level. The equipment shroud must be non-reflective and painted, wrapped or otherwise colored to match the existing pole. It is preferred that equipment shrouds be mounted flush to the pole, subject to the pole owner’s approval. Standoff mounts are permitted for the equipment shroud, but may not exceed six (6”) inches and must include metal flaps (or “wings”) to conceal the space between the shroud and the pole.

Ground-Mounted Equipment

Ground-mounted equipment is allowed when placed in conjunction with a new stealth pole and concealed in a ground mounted cabinet. The maximum acceptable dimensions of ground-mounted cabinet will be thirty (30") inches wide by thirty (30") inches deep by four (4') feet high and must be square in shape. Ground mounted cabinets must be installed flush to the ground and will be black in color, using Gloss Black #17038 per Federal Standard 595. Ground mounted equipment on sidewalks must not interfere with the flow of pedestrian traffic and must conform to the American's with Disabilities Act (ADA) in regards to appropriate sidewalk spacing.

Concealment

The City requires the applicant to incorporate concealment elements into the proposed design. Concealment will include approved camouflage or shrouding techniques.

Utility Lines

New service lines must be undergrounded whenever possible to avoid additional overhead lines. For metal poles, undergrounded cables and wires must transition directly into the pole base without any external junction box.

Lights

Unless otherwise required for compliance with FAA or FCC regulations, the facility shall not include any permanently installed lights. Any lights associated with the electronic equipment shall be appropriately shielded from public view. This subsection is not meant to prohibit installations on streetlights or the installation of luminaires or additional street lighting on new poles

Antennas

The antenna must be top-mounted and concealed within a radome that also conceals the cable connections, antenna mount and other hardware. GPS antennas must be placed within the radome or directly above the radome not to exceed six inches. The radome or side-mounted antenna and GPS antenna must be non-reflective and painted or otherwise colored to match the existing pole.

Spools and Coils

To reduce clutter and deter vandalism, excess fiber optic or coaxial cables for small cell facilities shall not be spooled, coiled or otherwise stored on the pole except within the approved enclosure such as a cage or cabinet.

Above-Ground Conduit

On wood poles, all above-ground wires, cables and connections shall be encased in the smallest section or smallest diameter PVC channel, conduit, u-guard, or shroud feasible, with a maximum dimension of 4" diameter. Such conduit shall be finished in zinc, aluminum or stainless steel, or colored to match those metal finishes.

Location of Pole Mounted Equipment

All pole-mounted equipment must be installed as flush to the pole as possible. Equipment attached to metal poles must be installed using stainless steel banding straps. Equipment attached to wood poles may be bolted to the pole or installed using stainless steel banding straps. When the straps are attached to a metal pole, they must match the color of the pole. Through-bolting or use of lag bolts is prohibited. All pole mounted equipment shall be located as close together as technically possible and if possible, on the same side of the pole.

When pole-mounted equipment is either permitted or required, all equipment other than the antenna(s), electric meter and disconnect switch must be concealed within an equipment cage. Equipment cabinet may not extend more than 24 inches from the face of the pole. The equipment cabinet must be non-reflective, colored to match the existing pole if attached to a metal pole, and in the color of brushed aluminum if attached to a wood pole. Equipment cabinets should be mounted as flush to the pole as possible. Any standoff mount for the equipment cabinet may not exceed four (4) inches.

Location of Ground Mounted Equipment

Ground equipment should be minimal and the least intrusive. It should be placed to minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a right of way, maximize the line of sight required to add to safe travel of vehicular and pedestrian traffic and maximize that line of sight at street corners and intersections and minimize hazards at those locations. The City may deny a request that negatively impacts vehicular and/or pedestrian safety. The equipment shroud or cabinet must contain all the equipment associated with the facility other than the antenna. All cables and conduits associated with the equipment must be concealed from view, routed directly through the metal pole (with the exception of wood power poles) and undergrounded between the pole and the ground-mounted cabinet.

ATTACHMENTS TO STREETLIGHT POLES

Residential Pole

Type A residential fixtures shall be mounted on a 14'-0" round tapered steel pole with black powder coat finish. Poles shall be equipped with fuses, hand hole and anchor base. Poles shall be KW Industries RTPT14-5.4-11-Black-2 or approved equal. Fuses shall be in-line single pole weatherproof holders with 5 amp fuses, Buss catalog #HEG or approved equal.

Type B residential fixtures shall be mounted on a 14'-0" decorative fluted aluminum pole with black powder coat finish. Pole shall be equipped with fuses, hand hole and anchor base. Poles shall be Hadco-2560 or approved equal. Fuses shall be in-line single pole weatherproof fuse holders with 5 amp fuses, Buss catalog #HEG or approved equal.

Type C residential fixtures shall be mounted on 25'-0" round tapered galvanized steel pole. Pole shall be equipped with fuses, hand hole, and anchor base. Poles shall be KW Industries RTSP25-80-11G or approved equal with 6'-0" up sweep arm which shall be KW Industries FD1000-72-2-G-2 or approved equal. Fuses shall be in-line single pole weatherproof fuse holders with 5 amp fuses or approved equal.

Commercial and Industrial Pole

Type D commercial and industrial fixtures shall be mounted on a 30'-0" round tapered galvanized steel pole. Pole shall be equipped with fuses, hand hole and anchor base. Poles shall be KW Industries RTSP30-80-11-G or approved equal with 6'-0" up sweep arm which shall be KW Industries FD1000-72-2-G-2 or approved equal. Fuses shall be in-line single pole weatherproof fuse holders with 5 amps fuses, Buss catalog #HEG or approved equal.

Type E commercial and industrial fixtures shall be mounted on a 30'-0" square tapered steel pole with bronze finish. Pole shall be equipped with fuses, hand hole and anchor base. Poles shall be KW Industries STSP30-7.15-11-G. Fuses shall be in-line single pole weatherproof fuse holders with 5 amp fuses, Buss catalog #HEG or industry equal.

Residential Fixtures

Type A lighting fixture shall be a 100 watt equivalent LED and have single piece die-cast housing with integral base retractor panel supports and self-aligning pole top fitter for 3 inch O.D. pole top tendon. Fixture shall have alzak¹ reflector and polycarbonate lens. All external metal surfaces shall be black. Fixture shall be equipped with photocell. Fixture shall be McGraw Edison traditionaire, catalog No. TRD 3292-120-R-V or approved equal.

Type B lighting fixture shall be a 100 watt equivalent LED decorative luminaire with clear texture UV stabilized polycarbonate globe, powered black paint finish, prismatic UV stabilized polycarbonate refractor globe for roadway type II distribution, 4KV pulse rated porcelain module base socket, and polished alzak reflector. The lighting fixture shall have a 3" self-aligning tendon with stainless steel set screws, utilize a high power factor ballast, and be equipped with a photocell. Fixture shall be Hadco Victorian II catalog #V731-A-100-HPS-120V-PC or approved equal.

Type C lighting fixture shall be a 150 watt equivalent LED fixture with die-cast aluminum, three piece assembly with top housing, optical system door, and ballast access door. Fixture shall be finished with hard textured baked gray enamel, reflector on piece alzak aluminum with non-wicking dacronpolyster filtering gasket. Fixture shall be equipped with photocell. Fixture shall be Crouse-Hinds OVS15SH22E-RA1014 or approved equal.

¹ Reflection from a smooth, shiny surface, such as specular aluminum or often called to as **Alzak**. Clear **alzak trim** creates low brightness.

Commercial and Industrial Fixtures

Type D lighting fixture shall be a 400 watt equivalent LED fixture with die-cast aluminum, three piece assembly with top housing, optical system door and ballast access door. Fixture shall be finished with hard textured baked gray enamel, reflector on piece alzak aluminum with non-wicking dacronpolyester filtering gasket. Fixture shall be equipped with photocell. Fixture shall be Crouse-Hinds OVM40SW3E-RA1014 or approved equal.

Type E lighting fixture shall be a 400 watt equivalent LED fixture with a rectilinear sharp cut-off for high intensity discharge lamps, anodized aluminum extrusion bronze housing, anodized aluminum reflector with Type I distribution, heat and impact resistant tampered flat glass lens, high power factor equipped with photocell. Lighting fixture shall be Garco EH-19-1-1-120400HPS-BRA-PC or approved equal.

SAMPLE POLES







