



BUILDING CODES COMMITTEE MEETING

MONDAY, MAY 4, 2020 | 6 PM

5th committee meeting

The Committee will meet remotely at 6 p.m. via Webex.

Please visit the City's website at

<https://cityofmauldin.org/your-government/meeting-minutes-agendas/>

to access the meeting via audio and videoconferencing

The public may not attend in person.



AGENDA

1. Call to Order

2. Public Comment

3. Reading and Approval of Minutes

- a. Building Codes Committee Meeting: April 6, 2020 {Pages 2-5}

4. Reports or Communications from City Officers

- a. Budget Review
- b. Department Reports
 - i. Boards and Commission Application Notice
 - ii. Permitting & Licensing Software Update

5. Unfinished Business

- a. Construction Noise Standards {Page 6}
- b. Small Wireless Facilities Discussion {Pages 7-66}

6. New Business

- a. None

7. Public Comment

8. Committee Concerns

9. Adjourn

Building Codes Committee Meeting



Minutes

Building Codes

April 6, 2020

6:00 p.m.

2nd committee meeting

Members present were Chairwoman Diane Kuzniar, Committee members Dale Black and Taft Matney. Business and Development Services Director David Dyrhaug and Brandon Madden, City Administrator were also present.

1. Call to Order- Chairwoman Kuzniar

2. Public Comment- None

3. Reading and Approval of Minutes

a. Building Codes Committee Meeting: March 2, 2020

Councilman Black made a motion to approve the minutes with Councilman Matney seconding. The vote was unanimous (3-0).

4. Reports or Communications from City Officers

a. Budget Review

b. Department Reports

David reported the budget is in great shape. 41% is remaining. 26% is the ideal remaining percentage.

5. Unfinished Business

a. Construction Noise Standards

Committee members asked for more research on this item at the last committee meeting. David reported most communities allow construction noise to start at 7:00 a.m. There are many different variations on what time construction noise must cease. The City of Mauldin's time is currently 10:00 p.m. One proposed option is that Mauldin adopt the same times that Greenville currently uses, which is starting at 7:00 a.m. and having the noise cease at 9:00 p.m. This will have the least impact to the construction community.

Another option is to allow a longer construction time during daylight savings time.



The third option is to have different times depending on the type of equipment being used and its proximity to a residential property. This would be the most difficult option to determine or enforce.

The fourth option is differing hours based on the nature of the activity. The last option would probably have the most adverse impact on construction and development because home construction goes on for a longer period of time.

The Home Builders Association sent an email supporting 7am-7pm or 8am-8pm in the summer. Chairwoman Kuzniar said the City could adopt 7am-9pm for anytime, rather than having different hours for different activities or different activities.

Councilman Black said he was in favor of option 1. Greenville has a lot of construction and the hours must be reasonable.

Councilman Matney said he would like to hold this in committee for another month.

City Administrator Madden said there is no rush on this item. We have gotten a few noise complaints, but holding it for another month would be fine.

Councilman Black said he doesn't have a problem with holding it for another month.

Councilman Matney made a motion to hold this item in committee for another month. Councilman Black seconded the motion and the vote was unanimous (3-0).

6. New Business

- a. Annexation at 1215 E. Butler Road- The City of Mauldin has received a signed petition requesting the annexation of a tract of land pursuant to South Carolina Code of Laws Section 5-3-150. This petition includes approximately 7.5 acres owned by East Butler, LLC, and is located at 1215 E. Butler Road.

The applicant has requested that this tract be zoned S-1, Services, upon annexation into the City of Mauldin. The applicant is planning to construct a Caliber Collision auto body repair shop with an upgraded façade on a 2.6-acre portion of this tract directly adjacent to an



existing Dollar General store and Laurens Electric. Utilities are available to the site and this is in Mauldin's fire service area.

Councilman Matney made a motion to send this to Council for approval. Councilman Black seconded the motion and the vote was unanimous (3-0).

- b. Planning Commission Term Limits- In 2002, the City of Mauldin adopted a provision regarding the Planning Commission that states that "no person shall be eligible for more than two consecutive terms". The City currently has some great volunteers serving on the Planning commission. This includes two individuals, Jonathan Paulsen and Dean Oang, who are each currently serving in their second term which is set to expire on June 30, 2020. The City will be hard-pressed to replace the breadth of planning and development knowledge that these two volunteers possess.

Other Mauldin boards and commissions do not have term limits nor is this provision found in the South Carolina Code of Laws.

Councilman Black asked David if he knows of other municipalities that have term limits. David answered no. Councilman Black said he has no problem with repealing the provision for term limits.

Council appoints the commission members and would continue to do so.

Councilman Matney made a motion to send this item to Council with a recommendation of repealing the provision requiring term limits. Councilman Black seconded the motion and the vote was unanimous (3-0).

- c. Permitting & Licensing Software- Last spring the City received notice that its permitting and licensing software at the time, Viewpermit, would be discontinued. At the time, the City elected to stay with the same company that it had been contracting with since 2014, ViewPoint, and transition to their newest product, Viewpoint Cloud.

The City contracted with ViewPoint to transition to Viewpoint Cloud on June 1, 2019. On December 11, 2019, City staff began actively using Viewpoint Cloud for all new permits and licenses. Because of some data migration issues on the part of ViewPoint, we delayed opening up the software for public use until those issues were fixed. These migration

Building Codes Committee Meeting



issues were fixed by ViewPoint as of March 1, 2020, and the software was opened for public use on March 4, 2020.

When City staff began using Viewpoint Cloud in December 2019, staff immediately began encountering a multitude of issues. We quickly discovered with the help of ViewPoint that a number of these issues were because the migration of data was not performed correctly by ViewPoint. It took 3 months for ViewPoint to resolve their migration issues but even now we are still missing information and data from the old system. Missing information includes previous flags on permits and licenses, e-mail addresses for businesses, and payment history for business licenses. Staff is asking committee if it should pursue other software options.

Councilman Matney said he is in favor of looking at other options. We are a resource for businesses and need the software to be able to continue being that.

Councilman Matney made a motion to allow staff to look at other software options and report back to committee. Councilman Black seconded the motion and the vote was unanimous (3-0).

7. Public Comment- None

8. Committee Concerns- None

9. Adjourn- Chairwoman Kuzniar adjourned the meeting.

Respectfully Submitted,
Cindy Miller
Municipal Clerk



BUILDING CODES COMMITTEE AGENDA ITEM

MEETING DATE: May 4, 2020

AGENDA ITEM: 5a

TO: Building Codes Committee

FROM: Business & Development Services Director, David C. Dyrhaug

SUBJECT: Construction Noise Standards

BACKGROUND

At the March 2, 2020, Building Codes Committee meeting, the Committee asked staff to explore alternative regulations pertaining to construction noise. At the April 6, 2020, Building Codes Committee meeting, staff presented to a few options for the committee's consideration. In addition to making no change, these included:

1. Adjusting to the City of Greenville's standard which prohibits construction noise after 9:00 p.m.;
2. Consider a daylight savings adjustment which generally allows construction to persist longer into the day during daylight savings time;
3. Consider different restriction of hours depending on the type of equipment being used (i.e. noncommercial/nonindustrial tools versus commercial/industrial tools); or
4. Consider different restriction of hours depending on the nature of the activity (i.e. ongoing construction versus short-term activities).

At the April 6, 2020, some interest was expressed for adjusting to the City of Greenville's standard. There was not really any interest indicated for the other alternatives presented.

Staff has recently discussed this with the President of the Greenville Home Builders Association. He indicated that he was not concerned if the City of Mauldin adjusts its restriction on construction noise beginning at 9:00 p.m. instead of 10:00 p.m.

ATTACHMENTS

None



BUILDING CODES COMMITTEE AGENDA ITEM

MEETING DATE: May 4, 2020

AGENDA ITEM: 5b

TO: Building Codes Committee

FROM: Business & Development Services Director, David C. Dyrhaug

SUBJECT: Small Cell Wireless Facilities Ordinance

BACKGROUND

The next wave of communications technology consisting of 5G technology utilizes higher frequencies with the capability to accommodate significantly higher data needs than current 4G/LTE technologies. Because high frequency waves have a harder time traveling over distance and through objects, the 5G network will be built on small cell site technology with antennas as close as 500 feet apart.

In its effort to help facilitate expansion of 5G technology, the Federal Communications Commission (FCC) has expressed favor for suing public rights-of-way as opposed to private property for the installation of the required equipment. Commissioners do not believe that enough private properties can be leased fast enough to allow this technology to be rolled out.

On September 26, 2018, the FCC adopted a Declaratory Ruling and Third Report and Order, FCC 18133, titled “Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment” (the Order). The order outlines the extent to which local agencies may or may not regulate the installation of small cell wireless communication facilities within the public rights-of-way and the use of existing public infrastructure. FCC policy prohibits municipalities from banning small cell wireless facilities and requires the competitively neutral and nondiscriminatory processing of permit requests within tightly defined time periods. Municipal aesthetic requirements will not be preempted if they are: (1) reasonable; (2) no more burdensome than those applied to other types of infrastructure deployments; and (3) objective and published in advance.

Municipal officials are tasked with the challenge to balance the importance of the technology to the economy and quality of life with the aesthetic impact of the technology on the rights-of-way.

MASC MODEL ORDINANCE

In 2018, the South Carolina Municipal Association worked with the telecommunications industry to craft a model small wireless facility ordinance. The model ordinance attempts to balance municipal and telecommunications interests. This model ordinance streamlines the review and permitting process while preserving municipal authority to control rights-of-way and the design and aesthetics of small cell wireless facility to the extent permissible.



Some of the features of the Municipal Association model ordinance include:

1. **Collocation permitted.** Permit the collocation of a small cell wireless facility on an existing utility pole or support structure.
2. **Collocation on decorative poles.** Collocation is not allowed on a decorative pole less than 20 feet tall.
3. **New pole installation permitted.** Permit the installation of a new pole or support structure for a small cell wireless facility.
4. **Permit required.** Require the applicant to obtain a permit from the municipality, except for routine maintenance and replacement. A provider can apply for up to 20 facilities in a single application.
5. **Permit fee.** Levy a permit fee of \$100 per each facility for the first five facilities and \$50 per each facility in excess of five up to a maximum of 20 facilities.
6. **Franchise fee.** The municipality can request franchise fees for locating facilities on a City-owned pole. The annual rate prescribed herein is \$50 per wooden pole or \$200 for all other City-owned poles.
7. **Review timeframes.** The municipality is required to notify the applicant within 10 days if any application information is missing and to notify the applicant of its decision to approve or deny the application within 60 days. The application is deemed approved if not acted on within this timeframe.
8. **Design.** The municipality may require a facility to be designed comparably to any existing utility structures, pole and equipment located within 500 feet. The municipality may require the use of reasonable stealth and concealment treatments, low-profile equipment and control boxes, and screening. Specific standards are not prescribed herein.
9. **Size of collocated facilities.** The height of a facility to be collocated on an existing utility pole or support structure shall not exceed 10 feet above the pole or support structure.
10. **Size of new pole installation.** The height of a new pole or support structure shall not the height of the tallest existing pole or support structure within 500 feet. If there is no existing pole or support structure within 500 feet, the maximum height is 40 feet in a residential area and 50 feet in any other area.
11. **Underground districts.** The municipality may establish an “underground district” which prohibits any utility provider from installing new above-ground structures.
12. **Historic or design districts.** The municipality may establish a “historic district” or a “design district” which has heightened design standards to protect the aesthetics of historic structures and/or decorative poles.
13. **Appeals and variances.** Allow appeals and variances from the provisions of this ordinance to be heard by the Zoning Board of Appeals.

MAULDIN DRAFT ORDINANCE

After researching ordinances of other communities inside and outside of South Carolina, staff prepared a draft ordinance that differed from the Municipal Association model ordinance. The ordinance prepared by staff includes heightened standards on the design and placement of small cell wireless facilities.

Some of the features of the ordinance prepared by staff include:

1. **Collocation permitted.** Permit the collocation of a small cell wireless facility on an existing utility pole, existing wooden pole with streetlight, and on existing streetlight poles.
2. **Collocation on decorative poles.** Collocation is not allowed on a decorative pole.
3. **New pole installation permitted.** Permit the installation of a new streetlight pole or monopole structure.



4. **Installation preference.** The preferred installation type is collocation on an existing privately owned utility pole.
5. **Permit required.** Require the applicant to obtain a permit from the City, including for maintenance, modification and replacement. A provider can apply for up to 20 facilities in a single application.
6. **Permit fee.** Levy a permit fee of \$100 per each facility for the first five facilities and \$50 per each facility in excess of five up to a maximum of 20 facilities.
7. **Franchise fee.** Levy an annual franchise fee of \$250 per each facility on a City-owned pole.
8. **Review timeframes.** The City will take action on each application according to its typical review timeframes (currently approximately 1-2 weeks).
9. **Design of antenna.** Antennas should be top-mounted, housed in a cylindrical shroud, and painted to match the color of the pole. Antenna shroud should not exceed 3 cubic feet, a height of 30 inches, and a maximum diameter 1.25 times the diameter of the top of the pole (the shroud should be tapered to meet the top of the pole).
10. **Design of equipment.** Pole-mounted equipment should only be installed when it cannot be installed underground or inside the pole. Equipment should not overhang the roadway or sidewalk, color should match the pole, and hardware, wiring and cables should be concealed. Equipment should not exceed 12 cubic feet.
11. **Design of pole-mounted facilities.** Facilities should be flush-mounted to the pole, cylindrical or curved in shape, not wider than the diameter of the pole, not protrude more than 18 inches from the face of the pole, and grouped closely together when multiple enclosures are included on the same pole.
12. **Design of new poles.** New poles should match existing poles in appearance, height, and design. New poles should be constructed of metal, cylindrical in shape, with the equipment housed in inside the pole. New poles should not be taller than existing poles in the same right-of-way, or 30 feet if no nearby existing poles. New poles are subject to setbacks from existing poles (250 feet), intersections (100 feet), driveways (20 feet), trees (15 feet), sidewalks (2 feet), roadways (4 feet), and permanent objects such as hydrants (6 feet).
13. **Additional standards.** Additional standards pertaining to lighting, noise, and signage apply.

AT&T COMMENTS

On February 10, 2020, representatives from AT&T provided comments after reviewing the draft ordinance prepared by staff. The following comments reflect the aspects of the draft ordinance they found most troubling.

1. The draft ordinance would prohibit the placement of small cells on existing decorative light poles, even when it is technologically feasible to do so in a manner that is consistent with the aesthetics of the decorative pole. Prohibiting viable placement opportunities like this will only increase the need to place new poles to support small cells.
2. The draft ordinance requires small cell facilities to be shrouded, the wires and similar equipment associated with the facilities to be enclosed within the body of the pole, and associated equipment to be in existing cabinets or underground. There are many areas in the City where other users of the rights-of-way are not held to these same standards. Imposing more stringent criteria on small cell facilities than on other equipment in the same right-of-way is a violation of state and federal law.
3. The annual franchise fee of \$250 to attach to a City-owned pole is excessive and does not bear a reasonable relationship to the costs the City incurs as a result of such attachments.
4. The application review process contains vague timelines instead of the firm 10-, 30-, 60-, and 90-day timeframes that are required to comply with federal law.



VERIZON COMMENTS

On February 25, 2020, representatives from Verizon provided comments after reviewing the draft ordinance prepared by staff. They requested our consideration of their comments which include the following.

1. SCDOT prefers local government approval to occur prior to their issuance of a permit. Therefore, the applicant will be unlikely able to provide an SCDOT permit as part of an application package.
2. Some antenna designs cannot accommodate shrouding.
3. Some antenna are not cylindrical but are rectangular.
4. Instead of placing burden of proof on applicant to seek opportunities to collocate before installing new poles, allow applicant to certify that good faith efforts were made to collocate.
5. Spacing and setback requirements are overly restrictive and effectively will prohibit new poles in the right-of-way. Please relax these requirements in favor of general principles of public safety, no overcrowding, and compliance with the City's tree code.
6. A 30-foot height restriction is not compliant with the FCC order that allows up to 50 feet.
7. New wood poles are prohibited in the draft ordinance but should be allowed to blend in with surrounding areas with existing wood poles.
8. The minimum spacing requirements is overly restrictive and has the effect of discriminating against wireless providers as to other utilities in the right-of-way.
9. The prohibition of backhaul equipment should be removed. This is governed by the state's and local government's franchise agreements, particularly those wireless providers that have the right to locate backhaul as a public utility under SC law.
10. Instead of imposing local regulation of RF emissions, replace with a general statement of compliance with all applicable FCC regulations.

CITY OF GREENVILLE ORDINANCE

Under their Land Management Ordinance, the City of Greenville regulates all wireless communications facilities. Some of the features of the City of Greenville ordinance include:

1. **Consistent design.** Facilities within the right-of-way and accompanying poles must be consistent with the corridor in which it is placed.
2. **Design catalogue.** The City Engineer maintains a catalogue of site-specific designs that have been approved by the city (the same design as those set forth in the catalogue are generally deemed appropriate at comparable locations).
3. **Collocation permitted.** Permit the collocation of a small cell wireless facility on an existing utility pole or support structure.
4. **Collocation design standards.** Antenna should be placed in a shroud at the top of the pole, shroud should be the same circumference as the pole, colored to match the pole, incorporate concealment elements. Where the antenna cannot be placed at the top of the pole, it may be placed on a cross-arm consistent with placement of cross-arms in the same corridor.
5. **Collocation size standards.** Antenna should not extend more than 6 feet above the pole and should not exceed 3 cubic feet.
6. **Accessory equipment.** Equipment may not be attached to the pole or ground-mounted unless no other placement is feasible or less intrusive. When attached to the pole, equipment should be flush-mounted with all cabling concealed. Ground-mounted equipment is conditional on concealment.
7. **Pole replacement.** If an existing pole must be replaced, the height of the pole cannot increase by more than 6 feet. When light poles are replaced, the new pole must be consistent with the pole being replaced.



8. ***Above-ground prohibition.*** Facilities shall not be located above-ground in any location where the lines of the incumbent local exchange carrier are underground, unless co-located on an existing structure or an existing structure is removed and replaced with a new structure.
9. ***No net increase of poles.*** Placement of facilities in the public rights-of-way shall not result in an increase in the number of support structures located in the public rights-of-way as of the date of this ordinance with the exception of new utility poles. New utility poles may only be installed where utility poles already exist in the same right-of-way in the immediate vicinity and collocation upon said poles is not feasible.
10. ***Review timeframes.*** The City will notify the applicant within 30 days if any application information is missing and to notify the applicant of its decision to approve or deny the application within 60 days for collocation installations and 90 days for new pole installations. The application is deemed approved if not acted on within this timeframe.

SC HOUSE BILL 4262

In 2019, a bill was introduced in both the House and the Senate that would further preempt local governments' ability to regulate small wireless facilities. This bill currently resides in the Senate Committee on Judiciary. Some of the components of this bill include:

1. A municipality cannot require a franchise agreement for the installation of small wireless facilities.
2. New or modified poles installed in the right-of-way may not exceed a height of 10 feet above the tallest existing pole within 500 feet, or a height of 50 feet, whichever is GREATER.
3. New facilities on existing poles may not extend more than 10 feet above the pole.
4. The municipality may require the collocation or decorative pole replacement to reasonably conform to the design aesthetics of the original decorative pole.
5. Regulation of small wireless facilities must be nondiscriminatory with regard to all users of the right-of-way.
6. A wireless provider must not be required to replace or upgrade an existing pole except for reasons of structural necessity.
7. Small wireless facilities must be classified as permitted uses subject only to administrative review.
8. The information requested on an application is limited to what is listed in the bill.
9. A municipality may not require the collocation of small wireless facilities on a specific pole or category of poles or require multiple antenna systems on a single pole.
10. A municipality may not require the use of specific pole types or configurations when installing new or replacement poles.
11. A municipality may not require the underground placement of small wireless facilities.
12. A municipality may not limit the horizontal separation distance of small wireless facilities collocated on existing poles.
13. Within 10 days of receiving an application, a municipality must determine and notify the applicant in writing whether the application is complete.
14. A municipality shall make its final decision to approve or deny the application within 60 days for the collocation of small wireless facilities and within 90 days for the installation, modification, or replacement of a pole.
15. A municipality may charge an application fee provided the fee is reasonable, nondiscriminatory, and recovers no more than the municipality's direct costs for processing an application.
16. For collocations on existing poles, the fee cannot exceed \$100 for each of the first 5 facilities and \$50 for each additional facility in the same application.
17. For new pole installations, the fee cannot exceed \$1,000 each.
18. For collocation on modified or replacement poles, the fee cannot exceed \$250 each.

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19. A municipality may charge a rate for the occupancy and use of the right-of-way. This rate cannot exceed \$100 per year for each facility collocated on any existing or replacement pole, or \$200 for each facility collocated on a new pole.
20. A municipality may charge a rate for collocation of a facility on a municipal pole not to exceed \$50 per municipal pole per year.

REQUEST

At this time, staff is seeking input on the direction the Committee may like to consider for this issue. This could include:

1. Make adjustments to the draft ordinance based on the input provided by AT&T and Verizon;
2. Model the ordinance after the Municipal Association's model ordinance;
3. Model the ordinance after the City of Greenville's ordinance;
4. Model the ordinance after SC House Bill 4262;
5. Make minor revisions to the draft ordinance prepared by staff;
6. Hold off on an ordinance at this time and allow the installation of small wireless facilities by agreement of City Council on a case-by-case basis; or
7. Some combination of alternatives listed above.

TIMELINE

On January 7, 2020, the Building Codes Committee forwarded this matter to City Council for consideration. The Building Codes Committee also requested the City Attorney's legal opinion on this ordinance by the City Council meeting.

On January 21, 2020, the City Council sent this matter back to Committee to allow sufficient time to review the Attorney's revisions to the proposed ordinance.

On February 10, 2020, the Building Codes Committee reviewed the Attorney's revisions. Representatives from AT&T attended this meeting and commented about the draft ordinance requesting significant revisions.

ATTACHMENTS

1. Redline Version of Draft Ordinance with Comments provided by AT&T
2. Redline Version of Draft Ordinance with Comments provided by Verizon

RESOURCES

The MASC model ordinance may be viewed at:

https://www.masc.sc/SiteCollectionDocuments/Model%20Ordinances/SWF_Ordinance.docx

The City of Greenville's regulations may be viewed at (GO TO SECTION 19-4.3.2 (G)):

https://library.municode.com/sc/greenville/codes/code_of_ordinances?nodeId=COOR_CH19LA_MA_ART19-4USRE_S19-4.3UECST

SC House Bill 4262 may be viewed at:

https://www.scstatehouse.gov/sess123_2019-2020/bills/4262.htm

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City Council Meeting



ORDINANCE NO. ____ -

AN ORDINANCE TO ESTABLISH THE STANDARDS FOR THE PLACEMENT OF SMALL WIRELESS FACILITIES IN COVERED AREAS IN THE CITY OF MAULDIN, SOUTH CAROLINA; AND FOR OTHER PURPOSES.

WHEREAS, the City of Mauldin ("City") encourages wireless infrastructure investment and wishes to provide a fair and predictable process for the deployment of Small Wireless Facilities while managing Public Rights-of-Way in a manner that promotes the interests of the public health, safety and welfare; and,

WHEREAS, the City recognizes that Small Wireless Facilities including facilities commonly referred to as small cell and distributed antenna systems are critical to delivering wireless access to advanced technology, broadband, and 9-1-1 services to residences, businesses, and schools within the City; and,

WHEREAS, the City recognizes that Small Wireless Facilities together with high capacity transport medium such as fiber optic cabling may be effectively deployed in Public Rights-of-Way; and,

WHEREAS, this Ordinance is intended to grant municipal consent to use of Rights-of-Way and establish a standard application process to streamline the issuance of necessary permits in a manner that is not a barrier to competition, and does not unnecessarily delay the implementation and installation of Small Wireless Facilities,

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF MAULDIN, SOUTH CAROLINA, that the Code of Ordinances City of Mauldin, South Carolina, is hereby amended to add a new Chapter 44 entitled "SMALL WIRELESS FACILITIES WITHIN THE RIGHT-OF-WAY," to read as follows:

44-1. Intent.

A. Background

The next wave of communications technology consisting of 5G technology utilizes higher frequencies with the capability to accommodate significantly higher data needs than current 4G/LTE technologies. The physical limits of the higher frequencies require that the transmitters be installed with much closer spacing than the 2± miles or greater distances that 4G/LTE technologies accommodate. The result of this physical need is that the public rights-of-way represent a convenient location for the required equipment.

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On September 26, 2018, the Federal Communications Commission (FCC) adopted a Declaratory Ruling and Third Report and Order, FCC 18-133, titled "Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment" (the Order). The order outlines the extent to which local ~~agencies government may or may not~~ regulations of the installation of small wireless communication facilities within the public rights-of-way and the use of existing public infrastructure is preempted by federal law.

Among other things, the Order provides that Municipal aesthetic requirements will not be preempted if they are: (1) reasonable; (2) no more burdensome than those applied to other types of infrastructure deployments; and (3) objective and published in advance. The Order also prohibits local government requirements (including aesthetic requirements) that materially inhibit wireless providers from filling coverage gaps, densifying their networks, introducing new service, or otherwise improving service capabilities.

Commented [TPW(1)]: This is set forth at paragraph 37 of the FCC's Order.

B. Intent

The intent of this ordinance is to accommodate the installation of small cell wireless facilities within the public rights-of-way within the City of Mauldin provided that installations are completed in a context-sensitive manner with regard to ~~minimum appropriate~~ standards for aesthetics, location, spacing, accommodation of multiple providers at each location, safety, noise, and equitable allocation of space.

Further, it is the intent of this ordinance to establish procedures and standards for the consideration, permitting, siting, construction, installation, collocation, modification, operation, regulation and removal of small cell wireless facilities in the public rights-of-way within the City of Mauldin. These procedures and standards are intended to comply with, and not conflict with or preempt, all existing and applicable state and federal laws, and all FCC rules and regulations to interpret and implement applicable federal statutes.

44-2. Applicability.

Subject to applicable state and federal law the South Carolina State Code and approval of an application under this Ordinance, an operator may locate and/or collocate a small cell wireless facility and construct, maintain, modify, operate, or replace utility poles and wireless support structures in, along, across, upon, and under public rights-of-way within the City of Mauldin.

An operator shall comply with this Ordinance and any rules, regulations, and design guidelines adopted by the City that are consistent with this Ordinance for the installation and/or collocation of a small cell wireless facility and construction, maintenance, modification, operation, or replacement of utility poles and wireless support structures in, along, across, upon, and under the right-of-way within the City of Mauldin, unless otherwise prohibited by state or federal law.

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Except to the extent set forth in this ordinance or to the extent necessary to comply with applicable state or federal law, nothing in this Ordinance shall preclude the City from applying its generally acceptable health, safety, and welfare regulations when acting on an application for a permit for a small cell wireless facility in the right-of-way within the City of Mauldin.

44-3. Definitions.

Antenna means communication equipment that transmits or receives electromagnetic radio frequency signals used in the provision of wireless services.

Applicable codes means uniform building, energy, electrical, plumbing, mechanical, gas, and fire codes in Title 6, Chapter 9, of the South Carolina Code of Laws, local amendments to those codes authorized by state law, and local codes or ordinances which impose requirements defined in this ordinance including objective design and concealment standards to regulate location, context, material, color, stealth, and concealment standards on a uniform and nondiscriminatory basis.

Applicant means any person who submits an application to the City of Mauldin and is a wireless services provider or a wireless infrastructure provider.

Application means a request submitted by an applicant for a permit to (1) collocate small wireless facilities; or, (2) construct, install, maintain, operate, replace or modify a utility pole or wireless support structure.

City-owned pole means (1) a utility pole owned or operated by the City of Mauldin, and (2) a pole or similar structure owned or operated by the City of Mauldin that supports only wireless facilities.

Collocate means to install, mount, maintain, modify, operate, or replace one or more wireless facilities on, under, within, or adjacent to an existing wireless support structure or utility pole within the jurisdiction of the City of Mauldin.

Person means an individual, corporation, limited liability company, partnership, association, trust, or other entity or organization.

Right-of-way means that area on, below, or above a public roadway, highway, street, sidewalk, alley dedicated to, managed or controlled by the City of Mauldin, Greenville County, or the State of South Carolina.

Small wireless facility or small cell wireless facility or small cell facility or SWF means means a Wireless Facility that meets both of the following qualifications: (i) each antenna is located inside an enclosure of no more than six (6) cubic feet in volume, or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an imaginary enclosure of not more than six (6) cubic feet; and (ii) all other wireless equipment associated with the facility is cumulatively no more than twenty-eight (28) cubic feet in volume. The following types of associated ancillary equipment are not included in the calculation of equipment volume: electric meter, concealment elements, telecommunications demarcation box, ground-based enclosures, grounding equipment, power transfer switch, cut-off switch, and vertical cable runs for the connection of power and other services.

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~~a fixed location that enables wireless services between user equipment and a communications network, including: (1) equipment associated with wireless communications; and (2) radio transceivers, antennas, coaxial or fiber optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration.~~

Utility pole means a pole or similar structure that is used in whole or in part for the purpose of carrying electric distribution lines or cables or wires for telecommunications, cable or electric service, or for lighting, traffic control devices, traffic control or directional signage, or a similar function regardless of ownership, including City-Owned Poles.

“Wireless Facility” means equipment at a fixed location that enables Wireless Services between user equipment and a communications network, including: (i) equipment associated with wireless communications; (ii) radio transceivers, Antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration. The term includes Small Wireless Facilities. The term does not include the structure or improvements on, under, or within which the equipment is Collocated, wireline backhaul facilities, coaxial or fiber optic cable that is between Wireless Support Structures or Utility Poles or coaxial or fiber optic cable that is otherwise not immediately adjacent to, or directly associated with, an Antenna.

Wireless infrastructure provider means any person, including a person authorized to provide telecommunications services in the State, that builds, installs or maintain utility poles, wireless communication transmission equipment, small wireless facilities or wireless support structures.

Wireless services mean any services provided using licensed or unlicensed spectrum, including the use of Wi-Fi, whether at a fixed location or mobile, delivered to the public using small wireless facilities.

Wireless services provider means a person who provides wireless services.

Wireless support structure or *support structure* means a freestanding structure, such as a monopole, or other existing or proposed structure designed to support or capable of supporting small wireless facilities.

44-4. Procedures.

A. Application

In accordance with federal and state law and consistent City Code, an operator must apply to the City to locate a new small cell wireless facility and/or collocate any portion of a small cell wireless facility on an existing utility pole or wireless support structure or to construct, maintain, modify, operate, or replace wireless support structures in, along, across, upon, and under the public rights-of-way within the City of Mauldin. Except as otherwise provided in this ordinance, anyone seeking to perform any of these actions shall first duly file a written application with the City, in accordance with the requirements in this Ordinance and additional requirements set forth in any design guidelines as modified from time to time by the City.

All Small Wireless Facility Applications filed pursuant to this Ordinance shall be on a form, paper or electronic, as required by the City. The Applicant may designate portions of its Application materials that it reasonably believes contain proprietary or confidential information as “proprietary” or “confidential” by clearly marking each page of such materials accordingly, and the City shall endeavor to protect materials so designated from public

Commented [TPW(2)]: AT&T strongly prefers Section 3 of the MASC Ordinance.

Commented [TPW(3)]: AT&T respectfully submits that this concept should be cascaded throughout the document.

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disclosure to the fullest extent permitted by state law.

Unless otherwise required by state or federal law, all applicants shall submit to the City ~~all the~~ materials and information ~~associated with each application as~~ outlined below for the application to be considered complete:

- (1) The applicant's name, address, telephone number and e-mail address;
- (2) Facility owner's name, address, telephone number and e-mail address, if different from the applicant;
- (3) Intended facility use: owner operated or owner leased capacity;
- (4) The names, addresses, telephone numbers, and e-mail addresses, of all consultants, if any, acting on behalf of the applicant with respect to the filing of the application;

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- (5) A general description of the proposed scope of work for the location or collocation of the small cell wireless facility;
- (6) Verification that the small cell wireless facility shall comply with all applicable codes, ~~including, but not limited to, this Ordinance, including without implication all applicable design guidelines;~~
- (7) Verification of payment of the annual municipal consent or administrative fee for telecommunications companies to use public rights-of-way pursuant to S.C. Code § 58-9-2230 and acknowledgement of its continuing ~~annual~~ obligation in accordance with those statutes;
- (8) Verification of municipal business license, if applicable;
- (9) Evidence that the applicant is duly authorized to do business in South Carolina;
- (10) Evidence the applicant has received any necessary certificate of public convenience and necessity or other required authority from the South Carolina Public Service Commission or the Federal Communications Commission or evidence that it is not required;
- (11) A copy of an approved South Carolina Department of Transportation (SCDOT) encroachment permit and all documents required by SCDOT as part of the encroachment permit application, if the proposed location is within a SCDOT right-of-way; and
- (12) ~~If the proposed location is outside of a SCDOT Right-of-Way, a~~ statement that the applicant has a lease, attachment agreement or other authorization from the owner of the utility pole or structure proposed for collocation.

Routine Maintenance and Replacement. An Application shall not be required for:

- (i) Routine maintenance;
- (ii) The replacement of a Small Wireless Facility with another Small Wireless Facility that is substantially similar or smaller in size, weight, and height; or
- (iii) The installation, placement, maintenance, operation, or replacement of Micro Wireless Facilities that are strung on cables between existing Utility Poles and/or Wireless Support Structures in compliance with the National Electrical Safety Code by a Wireless Services Provider or a Wireless Infrastructure Provider that is authorized to occupy the Public Rights-of-Way and that is remitting a consent, franchise, or administrative Fee pursuant to S.C. Code Ann. § 58-9-2230.

In accord with Article VIII, Section 15 of the State Constitution and related municipal code and ordinance provisions, the City consents to the use of Public Rights-of-Way by permit holders acting in compliance with this Ordinance.

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Applicants seeking to construct, modify, collocate, or replace more than one small cell wireless facility, may file, at the applicant's discretion, a consolidated application for up to 20 requests in a single application and receive a single permit for the construction, modification, collocation, or replacement of the small cell wireless facility subject to the following:

- (1) This single application may be filed for multiple small cell wireless facilities only if they are of substantially the same type.
- (2) The City must separately address small cell wireless facilities for which incomplete information has been received or which are denied and it must grant a permit for any and all sites in a single application that it does not deny subject to the requirements of this Ordinance.
- (3) In the case of a consolidated application, the fees shall be cumulative.

C. Fees and Costs

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- (l) *Application processing costs.* Unless otherwise provided by law, including without limitation S.C. Code § 58-9-2230, all applications for permits pursuant to this Ordinance shall be accompanied by an application processing cost of \$100.00. Application costs for small wireless facilities applied for in a consolidated application shall be \$100.00 each for the first five (5) small wireless facilities and \$50.00 each for each additional small wireless facility. For clarity, any Applicant that pays either a franchise, consent Fee, or administrative Fee pursuant to the requirements of S.C. Code § 58-9-2230 shall not be required to pay any building permit Fee, zoning permit Fee, encroachment Fee, degradation Fee, or any other Fee assessed on a telecommunications provider for its occupation of or work within the ROW.

~~Annual rate for attachments to city-owned poles. Pursuant to S.C. Code § 58-9-2230, each individual applicant will be subject to an annual franchise or consent fee. The annual rate to place a small wireless facility on a City-owned pole shall be \$250.00 for each small wireless facility per year. This rate is in addition to reimbursement to the City for any expenses for make-ready work. The City reserves the right to require a pole attachment to further define the terms and conditions of attachments to City-owned poles. The Applicant shall reimburse the City for expenses for any reasonable make-ready work. The City shall provide a good faith estimate for any make-ready work necessary to enable the pole to support the requested Small Wireless Facility, including pole replacement if necessary, within sixty (60) days after receipt of a completed request. Make-ready work including any pole replacement shall be completed within sixty (60) days of written acceptance of the good faith estimate by the Wireless Services Provider or the Wireless Infrastructure Provider.~~

(2)

~~(3) *Make-ready reimbursement.* For City-owned poles, the applicant shall reimburse the City for expenses for any reasonable make-ready work, if any are required. The City shall provide a good faith estimate for any make-ready work necessary to enable the pole to support the requested small cell wireless facility, including pole replacement if necessary.~~

~~(4)(3) *Lawful fees and taxes.* In addition to the applicable fees as specified above, every permit shall include as a condition the applicant's agreement to pay such lawful franchise fees, business license taxes, administrative fees and consent fees as are permitted under applicable ad valorem taxes, service fees, sales taxes, or other taxes and fees as may now or hereafter be lawfully imposed on other businesses within the City.~~

~~(5)(4) *Cease payment following removal.* A wireless services provider is authorized to remove its facilities at any time from a City-owned pole and cease paying the annual rate to the City as of the next due date for payment following the removal, provided, however, the provider pay its pro-rata share of the remaining term and expenses, if any.~~

~~(5) *Tax liabilities and assessments not applicable.* Placement of a small cell wireless facility in the public rights-of-way or attachment of any portion of a small cell wireless facility~~

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to a wireless support structure and any fees associated therewith shall not subject the City to any state or local tax liabilities or assessments.

(6) Section 5. Requirements for Small Wireless Facilities in Covered Areas.

(7) (a) Administrative Review. The City shall perform an administrative review of permit Applications including the location or installation of new, modified, or replacement Utility Poles and/or Wireless Support Structures and the attachment of Wireless Facilities and equipment on Utility Poles or Wireless Support Structures. Review factors, in addition to location, shall include the size, shape, color, texture, and materials of the structures and attachments.

(8) (i) The City may require a proposed Wireless Facility be designed to not be significantly more readily apparent or plainly visible (to a reasonable person of ordinary sensibilities) from Covered Areas than existing utility structures, poles and equipment located within five hundred (500) linear feet on the same Covered Area as the subject Utility Pole or Wireless Support Structure.

(9) (ii) Where Small Wireless Facilities are determined to be appropriate, the use of reasonable stealth and concealment treatments, low profile equipment and control boxes, and screening may be required to avoid significant negative impacts on the character and visual aesthetics of the area. However, such requirements may be waived by the City upon a showing that the particular location of a Small Wireless Facility does not warrant stealth or concealment treatments or imposes an excessive expense. The waiver shall be granted or denied within forty-five (45) days after the date of the request.

(10) (iii) Supplemental review districts identified in Section 5(c) and listed in Appendix A may be subject to a higher level of review.

(11) (b) Maximum Size of Permitted Use.

(12) (i) The height of an Antenna of a Collocated Small Wireless Facility shall be limited to the greater of ten (10) feet above (a) the height of an existing or modified Utility Pole or Wireless Support Structure; or (b) the height of a new Utility Pole or Wireless Support Structure as provided in (ii) below.

(13) (ii) The height of a new or modified Utility Pole, or Wireless Support Structure is limited to the greater of (a) the tallest Utility Pole, excluding Transmission Poles, or Wireless Support Structure located in the same Covered Area, measured from grade, in place within five hundred (500) linear feet on the same Covered Area as the subject Utility Pole or Wireless Support Structure as of the effective date of this Ordinance; or (b) in the absence of any such Utility Pole or Wireless Support Structure, either (i) forty (40) feet in any area zoned exclusively for single family residential use, unless a waiver is granted for good cause shown, or (ii) fifty (50) feet in any other area.

(14) (iii) Collocation is not allowed on a Decorative Pole less than twenty (20) feet in height.

D. Application Review

(1) Application completeness**(i)** Within ten (10) days of receiving an Application, the City must determine and notify the Applicant whether the Application is complete; or if an Application is incomplete, the City must specifically identify the missing information. ~~Shortly after receiving an application, the City will determine and notify~~

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~~the applicant whether the application is complete, or if an application is incomplete, the City will specifically identify the missing information.~~

~~(2) Application review. Absent an agreement to the contrary between the City and Applicant that is confirmed by e-mail or other writing, the City shall make its final decision to approve or deny the Application within sixty (60) days of submission of a completed Application ~~or deny an application according to its typical review timeframes.~~ The City must notify the Applicant in writing of its final decision, and if the Application is denied, specify the basis for a denial, including citations to federal, state or local code provisions and/or statutes on which the denial was based~~

~~(2) Application denial. If an application is denied, the City will provide in writing its reasons for denying the request, including, if applicable, specific references to any applicable law supporting the denial.~~

~~(4)(3) Application resubmit/al. Notwithstanding an initial denial, the Applicant may cure the deficiencies identified by the City and resubmit the Application within thirty (30) days of the denial, and the City shall approve or deny the revised Application within thirty (30) days of receipt of it. The subsequent review by the City shall be limited to the deficiencies cited in the original denial. ~~Notwithstanding an initial denial, the applicant may cure the deficiencies identified by the City and resubmit the application to the City for further review.~~~~

~~(5) Removal of a small cell wireless facility. The City shall act on requests to remove wireless support structures associated with a small cell wireless facility from the public rights-of-way in accordance with its typical review timeframes for the general right-of-way permit required for this activity.~~

Effect of Permit.

~~(a) Authority Granted: No Property Right or Other Interest Created. A permit from the City authorizes an Applicant to undertake only certain activities in accordance with the Ordinance, and does not create a property right or grant any authority whatsoever to the Applicant to impinge upon the rights of others who may already have an interest in the Covered Area.~~



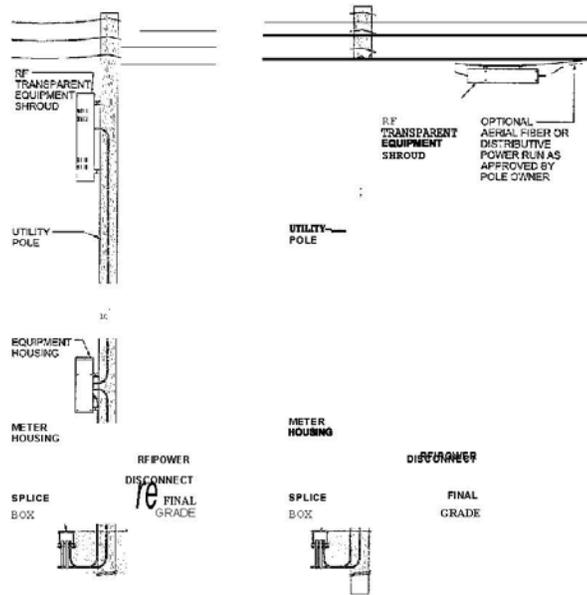
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44-5. Small Cell Wireless Facilities Types

In addition to any small wireless facilities approved pursuant to the foregoing provisions of this Ordinance, the following ~~There are~~ four types of small cell wireless facilities will be permitted within the City of Mauldin.

A. Type 1: Attachments to Utility Poles



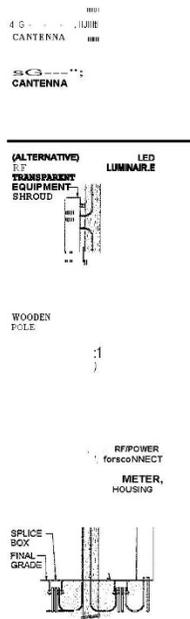
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B. Type 2: Small Cell Wireless Facility on Existing Wooden Pole with Streetlight





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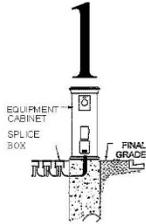
C. Type 3: Combination Small Cell Wireless Facility and Streetlight



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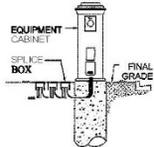


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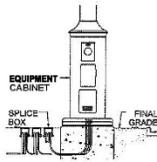
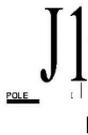
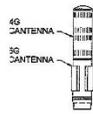




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D. Type 4: Freestanding Small Cell Wireless Facility Monopole Structure



E. Installation Type Preferences. Without limiting the application of the foregoing provisions of this ordinance, and subject to applicable state and federal law, the following preferences apply:

- (1) The most preferred installation type is a collocation of an antenna and associated small cell facilities on an existing privately owned utility pole along a side street.
- (2) The least preferred installation type is a new freestanding small cell facility.
- ~~(3) Existing decorative light poles are not permitted for collocations of small cell facilities due to the design aesthetics, height, and structure capacity of these fixtures.~~

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~~(4)~~(3) In an effort to reduce congestion and clutter in the public right-of-way, applicants shall consider existing support structures prior to installing any new support structures.

44-6. Design Guidelines

The following standards shall apply to all small cell facilities within the public right-of-way throughout the City of Mauldin, unless otherwise noted.

A. Antennas

(1) Mounting Specifications

- (a) *Top-mounted.* Unless otherwise required by the owner of the pole, the preference is for all antenna shall be to be top mounted to the top of the support structure pole, aligned with the centerline of the structure.
- (b) *No overhang.* The preference is for antenna not to ~~No antenna shall~~ overhang the roadway, sidewalk, or other travel way.

(2) Maximum Size

- ~~(a) *Volume.* Each antenna shall be located entirely within a shroud enclosure of not more than three (3) cubic feet in volume.~~
- ~~(b) *Height.* No antenna shall exceed a height of 30 inches.~~
- ~~(c) *Diameter.* The diameter of the antenna or antenna enclosure shall typically not exceed the diameter of the top of the support structure pole, and to the maximum extent practical, shall appear as a seamless vertical extension pole. In no case shall the maximum diameter of the shroud be wider than 1.25 times the diameter of the top of the pole. Where the maximum shroud diameter exceeds the diameter of the top of the pole, the shroud shall be tapered to meet the top of the pole.~~

(3) Design Specifications

- (a) *Shape.* The preference is for antennas to ~~shall~~ be generally cylindrical in shape.
- ~~(b) *Enclosure.* Antenna shall be completely housed within a cylindrical shroud that is capable of accepting paint to match the support structure.~~
- ~~(c)~~(b) *Color.* Color for all antennas and shrouds ~~shall~~ should reasonably blend with ~~match~~ the color of the support structure.

B. Associated Small Cell Facilities and Equipment

Commented [TPW(4): AT&T respectfully submits that these guidelines should be amended to conform to the size requirements set out above. Also, as a general rule, AT&T is concerned that it is not reasonable, appropriate, necessary, or legal to apply such stringent design guidelines to each and every area of the city. We are amenable to discussing having heightened standards apply to clearly-defined areas of the city that, because of their objective and unique qualities, distinguish them from the vast majority of the city and warrant heightened standards that apply to all occupants of the ROW (and not just wireless providers installing small wireless facilities). But we are opposed to applying these heightened guidelines to small wireless facilities anywhere in the city, especially when they do not apply to all other users of the ROW. In addition to being bad public policy, applying these provisions in this manner violates both state and federal law.

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~~(1) Pole-mounted equipment shall only be installed when the applicant can demonstrate with clear and convincing evidence that other methods of equipment placement, such as underground installations and installations inside the pole, are not technically feasible or not potentially available.~~

~~(1)~~ Specifications

- (a) *Maximum size.* Exclusive of the antenna, all wireless equipment associated with the small cell facility shall not cumulatively exceed twelve ~~(12)~~ cubic feet in volume.
- (b) *No overhang.* ~~The preference is that n~~No portion of a wireless support structure or small cell facility cabinet or enclosure shall ~~shall~~ overhang the roadway, sidewalk, or other travel way.
- (c) *Color.* Color for all small cell facilities and enclosures/cabinets attached to wireless support structures or integrated within the transformer base ~~shall~~ *should reasonably blend with* ~~shall match~~ the color of the associated wireless support structure.
- (d) *Hardware.* ~~The preference is for~~ All hardware attachments shall ~~to~~ be hidden.
- ~~(e) *Service lines.* All service lines from the power source to the small cell facilities and wireless support structure shall be located underground.~~
- ~~(f) *Wiring and cables.* All wiring and cables must be housed within the steel support structure or pole and extended vertically within a flexible conduit. Where not technically feasible or practical, all cables shall be in conduits and shall be flush with the pole. Exposed wires, cables, connections and external conduit are prohibited.~~
- ~~(g) *Excess wires and cables.* Spools and/or coils of excess fiber optic or coaxial cables or any other wires shall not be stored on the pole except completely within the approved enclosures or cabinets.~~

C. Small Cell Facilities Mounted to Wireless Support Structures

(1) Mounting Specifications

- (a) *Minimum clearance.* All small cell facilities mounted to wireless support structures shall provide a minimum clearance of 10 feet above established grade.
- (b) *Placement on pole.* All small cell facilities and equipment enclosures shall be mounted on the side of the pole opposite the direction of vehicular traffic of the adjacent roadway. Enclosures shall extend perpendicular from the pole and parallel to the right-of-way. Enclosures shall not interfere with existing brackets on poles.
- (c) *Flush mounting.* All pole-mounted equipment and enclosures shall be installed as flush to the pole as possible. In no case shall an enclosure be installed more than four (4) inches from the wireless support structure pole.

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- (d) *Maximum protrusion.* Small cell equipment enclosures shall not protrude more than eighteen (18) inches beyond the face of the pole to the outermost portion of the enclosure.
- (e) *Attachment method.* The shroud enclosure shall be securely strapped to the wireless support structure pole using stainless steel banding straps. Through-bolting, use of lag bolts, or welding on publicly-owned wireless support structures is prohibited. New wireless support structures may utilize mounting brackets in accordance with the maximum horizontal offset requirements. Care should be taken to integrate the mounting hardware into the enclosure design.
- (f) *Multiple enclosures.* Where multiple enclosures are proposed on a wireless support structure pole, the enclosures shall be grouped as closely together as possible on the same side of the pole. No more than two enclosures shall be mounted or attached to any individual pole.

(2) Design Specifications

~~(a) *Size.* Small cell equipment enclosures shall be the smallest size practicable to house the necessary small cell facilities and equipment.~~

~~(b)(a) *Shape and width.* The preference is for small cell equipment to be enclosures shall be cylindrical or curved in shape, and shall generally be no wider than the maximum outer diameter of the pole to which it is attached, to the maximum extent possible.~~



~~(e)(b) *Concealment of gap.* Metal flaps or "wings" shall extend from the enclosure to the pole to conceal any gap between the enclosure and the pole. The design of the flaps shall be integrated with the design of the enclosure.~~

Commented [TPW(5): AT&T respectfully submits that, in light of the controlling "effective prohibition" standard set forth in the FCC's order, all of these provisions should be set forth as preferences and not absolute requirements.

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~~(c)~~ *Color.* All small cell equipment enclosures shall be painted to match the color of the associated wireless support structure. On a wood pole, the enclosures and hardware shall be colored gray.

(3) City-Owned Support Structures

- (a) *Agreement.* The City, in its proprietary capacity, retains sole and absolute discretion over whether and on what terms it may allow small cell facilities on its structures. Applicants shall provide a valid and fully executed agreement to use any City-owned support structure.
- (b) *Power supply.* Small cell facilities located on City-owned structures shall not use the same power or communication source providing power and/or communication for the existing facility original to the purposes of the structure. The independent power source must be contained within a separate conduit inside the support structure. The applicant shall coordinate, establish, maintain and pay for all power and communication connections with private utilities.
- (c) *Power disconnect.* The City reserves the right to disconnect power to the radio when working on the structure. The applicant shall provide a disconnect so the City has the ability to easily shut off radio signals and power while working on the structure.

D. Ground Mounted Equipment Cabinets

(1) Design Specifications

- (a) *Cabinet.* Ground-mounted equipment shall be concealed within a single shroud or cabinet and shall contain all the equipment associated with the facility other than the antenna.
- (b) *Installation types.* Ground-mounted equipment may only be installed in the following applications: (1) concealed within the pole, (2) placed within a cabinet integrated in the base of the pole, (3) in an existing above-ground cabinet, or (4) placed in a flush-to-grade underground equipment vault.
- (c) *Color.* Color for all ground-mounted cabinets shall match the pole color.
- (d) *Shape.* Equipment cabinets integrated in the base of the pole shall be cylindrical.
- (e) *Size.* Equipment cabinets integrated in the base of the pole shall not exceed a diameter of eighteen (18) inches. Where the diameter of the cabinet exceeds the diameter of the pole, the transition between the cabinet and the pole shall be tapered.
- (1) *Conduits.* All cables and conduits associated with the equipment shall be concealed from view and shall be underground between the pole and the ground-mounted cabinet.

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(g) *Owner identification.* A maximum four (4) inch by six (6) inch plate with the Carrier's name, location, identifying information, and emergency telephone number shall be permanently fixed to the cabinet on the side of the cabinet opposite the direction of vehicular traffic to the adjacent roadway.

(2) Placement Specifications

- (a) *Sight triangles.* Ground mounted equipment cabinets shall comply with the City of Mauldin regulations regarding sight distance triangles.
- (b) *No obstructions.* Ground mounted equipment cabinets shall be located so as to avoid any physical or visual obstruction to pedestrian or vehicular traffic or any other location that would create safety hazards to pedestrians, cyclists, or motorists.

E. New Wireless Support Structures

(1) New wireless support structures shall only be constructed when the applicant can demonstrate with clear and convincing evidence that using an existing structure is not technically feasible or not potentially available.

(2) Placement Specifications

- (a) *Alignment with existing features.* New wireless support structures shall be located in alignment with existing trees, facilities, support structures, tower, utility poles, and streetlights, and are to be spaced evenly between any of these other objects.
- (b) *Alignment with property lines.* New wireless support structures shall be aligned as close as practicable with adjacent side property lines, or with shared wall locations in adjacent multi-tenant structures.
- (c) *Storefronts and signs.* In no case shall a wireless support structure be sited directly in front of an adjacent building entrance or storefront. Special care shall be taken to avoid siting wireless support structures in conflict with business signs.
- ~~(d) *Spacing from existing poles.* New wireless support structures shall be spaced a minimum of 250 feet from any existing poles including, but not limited to, utility poles, street light poles, and traffic signal poles.~~
- ~~(d)~~ *Sight triangles.* New wireless support structures shall not be sited in conflict with required intersection sight distance triangles.
- ~~(d)(c)~~ *Setback from intersections.* New wireless support structures shall be setback at least 100 feet from any public street intersection measured from the closest edge of the street.
- ~~(d)(f)~~ *Setback from driveways.* New wireless support structures shall be located a minimum of twenty (20) feet from driveway aprons.

Commented [SM6]: Recommend removal of this requirement. This term requires new structures to be at least 250' from any existing poles. This includes street lights, utility poles and traffic signals. This is problematic because it could effectively prohibit our options to deploy small cells to address our network needs by eliminating our use of most of the public ROW within the City's jurisdiction.

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- (h)(g) *Setback from trees.* New wireless support structures shall be located a minimum of fifteen (15) feet from all trees to prevent disturbance within the critical root zone of any tree.
- (h)(h) *Setback from sidewalks.* New wireless support structures shall be located a minimum of two (2) feet from any sidewalk edge or other walkway.
- (G) *Setback from roadways.* New wireless support structures shall be located a minimum of four (4) feet from any road pavement edge.
- (k) *Setback from objects.* New wireless support structures shall be located a minimum of six (6) feet from any other permanent object, such as fire hydrants, or existing lawful encroachment in the right-of-way to allow for access.
- (l) *No obstructions.* New wireless support structures shall be located so as to avoid any physical or visual obstruction to pedestrian or vehicular traffic or any other location that would create safety hazards to pedestrians, cyclists, or motorists.
- (3) Maximum Size
- (a) *Height.* New wireless support structures and antennas shall be no taller than functionally necessary, and coordinate with the height of existing poles in the same right-of-way to the maximum extent practicable. If a compatible height cannot be clearly determined, then a maximum pole height of 30 feet above grade shall be used.
- (b) *Diameter.* Pole diameter shall be consistent with the surrounding poles.
- (4) Design Specifications
- (a) *Generally.* New poles shall match existing poles in appearance, height, design, and material as those used on the same section of street. However, where requirements herein represent a higher standard, the higher standard shall apply.
- (b) *Color.* Color for new wireless support structures shall match the color of existing poles in the same right-of-way to the maximum extent practicable. In the absence of existing poles, the color shall be a black powder coated finish.
- (c) *Shape.* New poles shall be cylindrical in shape.
- (d) *Material.* New poles shall be constructed of metal. Wood poles shall be prohibited.
- (e) *Equipment cabinet.* All small cell carrier equipment shall be housed internal to an equipment cabinet at the base of the pole or otherwise hidden inside the pole.



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F. Minimum Spacing and Maximum Number

Blockface Length Intervals (in feet)	Number of Small Cell Facilities Permitted per Blockface ²	Minimum Distance between Facilities on the Same Blockface (in feet) ³	Limit per Carrier per Block ⁴
0-150	1	N/A	1
151 - 300	2	60	1
301-450	3	60	1
451 - 600	4	60	1
601- 750	5	60	2
Over 750	6	60	2

¹ Block length shall be measured along the edge of curb between the edge lines extended of adjacent intersecting streets.

² This is inclusive of all types of installations and regardless of carrier.

³ In other words, the minimum distance between two facilities sharing the same side of the block. Distance shall be measured in a linear fashion along the edge of curb between two facilities' center points.

⁴ A block is defined as two opposing blockfaces.

Commented [SM7]:
Recommend removal of this chart that regulates the number of facilities allowable per block by all carriers combined along with spacing intervals. Together with Section E.2.d above, if put into practice, would impose more limitations to AT&T and other carriers by setting an arbitrary cap on the number of small cell facilities installations that are allowable in an area.

G-F. Removal of Small Cell Facilities and Wireless Support Structures

(1) Remediation

- (a) *General area.* Applicants shall restore all areas of the right-of-way impacted by the small cell facilities and/or wireless support structure installation and/or removal to equal or better condition.
- (b) *City-owned structures.* All City-owned support structures shall be returned to an equal or better state, upon removal of small cell facilities. All mounting hardware and equipment shall be removed from the site. All holes left in the pole shall be neatly sealed from any moisture intrusion and painted to match the pole.

H-G. Other Small Cell Facilities Requirements

(1) Lighting

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- (a) Lighting association with small cell facilities is prohibited. Any internal lights associated with electronic equipment shall be shielded from public view. This provision shall not be interpreted to prohibit the installation of luminaires on new poles.
- (2) Noise
 - (a) Noise produced by small cell facilities shall not exceed 5d.BA above ambient sound. Other noise regulations may apply.
- (3) Labels and Signage
 - (a) *Owner identification.* A maximum four (4) inch by six (6) inch plate or label with the Carrier's name, location, identifying information, and emergency telephone number shall be permanently affixed to the small cell equipment enclosure on the side of the enclosure opposite the direction of vehicular traffic of the adjacent roadway. ID labels shall use background colors that match the color of the enclosure to which the label is affixed.
 - (b) *RF warning sticker.* A maximum four (4) inch by six (6) inch sticker shall be affixed to the small cell facility on the side of the facility opposite the direction of the adjacent roadway as may be required by government or utility regulations. Stickers shall use background colors that match the color of the facility to which the label is affixed.
 - (c) *Signage.* Signage is prohibited on all small cell facilities and wireless support structures, including stickers, logos, text, and other non-essential graphics and information other than the owner identification unless required by FCC.
- (4) Prohibited Wireless Facilities
 - (a) Microwave, macro towers, and other wireless backhaul facilities are not permitted within the right-of-way.
- (5) Engineering
 - (a) All small cell facilities and wireless support structures can have a significant structural, wind and other loading impact. All small cell facilities attachments and new wireless support structures shall be properly engineered to assure safety.
 - (b) All structural components of small cell facilities and wireless support structures shall be designed for a minimum of 115 MPH wind velocity in accordance with applicable standards.

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(6) Health and Safety

- (a) All small cell facilities and wireless support structures shall be designed, constructed, operated, and maintained in compliance with all generally applicable health and safety regulations, including without limitation all applicable regulations for human exposure to radiofrequency (RF) emissions.
- (b) The applicant shall certify that radiation is at safe levels by a non-ionizing radiation electromagnetic radiation report (NIER). The NIER report shall be endorsed by a qualified professional. The report 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 (uncontrolled) when accessing the pole by climbing or bucket.

This ordinance shall become effective upon and after its final passage.

Passed on First Reading: _____

Passed on Second Reading: _____

CITY OF MAULDIN, SOUTH CAROLINA

BY: _____

Terry Merritt, Mayor

ATTEST:

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City Council Meeting



Cindy Miller, Municipal Clerk

APPROVED AS TO FORM:

John Duggan, City Attorney

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ORDINANCE NO. _____

AN ORDINANCE TO ESTABLISH THE STANDARDS FOR THE PLACEMENT OF SMALL WIRELESS FACILITIES IN COVERED AREAS IN THE CITY OF MAULDIN, SOUTH CAROLINA; AND FOR OTHER PURPOSES.

WHEREAS, the City of Mauldin (“City”) encourages wireless infrastructure investment and wishes to provide a fair and predictable process for the deployment of Small Wireless Facilities while managing Public Rights-of-Way in a manner that promotes the interests of the public health, safety and welfare; and,

WHEREAS, the City recognizes that Small Wireless Facilities including facilities commonly referred to as small cell and distributed antenna systems are critical to delivering wireless access to advanced technology, broadband, and 9-1-1 services to residences, businesses, and schools within the City; and,

WHEREAS, the City recognizes that Small Wireless Facilities together with high capacity transport medium such as fiber optic cabling may be effectively deployed in Public Rights-of-Way; and,

WHEREAS, this Ordinance is intended to grant municipal consent to use of Rights-of-Way and establish a standard application process to streamline the issuance of necessary permits in a manner that is not a barrier to competition, and does not unnecessarily delay the implementation and installation of Small Wireless Facilities,

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF MAULDIN, SOUTH CAROLINA, that the Code of Ordinances City of Mauldin, South Carolina, is hereby amended to add a new Chapter 44 entitled “SMALL WIRELESS FACILITIES WITHIN THE RIGHT-OF-WAY,” to read as follows:

44-1. Intent.

A. Background

The next wave of communications technology consisting of 5G technology utilizes higher frequencies with the capability to accommodate significantly higher data needs than current 4G/LTE technologies. The physical limits of the higher frequencies require that the transmitters be installed with much closer spacing than the 2+ miles or greater distances that 4G/LTE technologies accommodate. The result of this physical need is that the public rights-of-way represent a convenient location for the required equipment.

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On September 26, 2018, the Federal Communications Commission (FCC) adopted a Declaratory Ruling and Third Report and Order, FCC 18-133, titled “Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment” (the Order). The order outlines the extent to which local agencies may or may not regulate the installation of small wireless communication facilities within the public rights-of-way and the use of existing public infrastructure.

Municipal aesthetic requirements will not be preempted if they are: (1) reasonable; (2) no more burdensome than those applied to other types of infrastructure deployments; and (3) objective and published in advance.

B. Intent

The intent of this ordinance is to accommodate the installation of small cell wireless facilities within the public rights-of-way within the City of Mauldin provided that installations are completed in a context-sensitive manner with regard to minimum standards for aesthetics, location, spacing, accommodation of multiple providers at each location, safety, noise, and equitable allocation of space.

Further, it is the intent of this ordinance to establish procedures and standards for the consideration, permitting, siting, construction, installation, collocation, modification, operation, regulation and removal of small cell wireless facilities in the public rights-of-way within the City of Mauldin. These procedures and standards are intended to comply with, and not conflict with or preempt, all applicable state and federal laws, and all FCC rules and regulations to interpret and implement applicable federal statutes. **44-2.**

Applicability.

Subject to the South Carolina State Code and approval of an application under this Ordinance, an operator may locate and/or collocate a small cell wireless facility and construct, maintain, modify, operate, or replace wireless support structures in, along, across, upon, and under public rights-of-way within the City of Mauldin.

An operator shall comply with this Ordinance and any rules, regulations, and design guidelines adopted by the City that are consistent with this Ordinance for the installation and/or collocation of a small cell wireless facility and construction, maintenance, modification, operation, or replacement of wireless support structures in, along, across, upon, and under the right-of-way within the City of Mauldin, unless otherwise prohibited by state or federal law.

Nothing in this Ordinance shall preclude the City from applying its generally acceptable health, safety, and welfare regulations when acting on an application for a permit for a small cell wireless facility in the right-of-way within the City of Mauldin.



44-3. Definitions.

Antenna means communication equipment that transmits or receives electromagnetic radio frequency signals used in the provision of wireless services.

Applicable codes means uniform building, energy, electrical, plumbing, mechanical, gas, and fire codes in Title 6, Chapter 9, of the South Carolina Code of Laws, local amendments to those codes authorized by state law, and local codes or ordinances which impose requirements defined in this ordinance including objective design and concealment standards to regulate location, context, material, color, stealth, and concealment standards on a uniform and nondiscriminatory basis.

Applicant means any person who submits an application to the City of Mauldin and is a wireless services provider or a wireless infrastructure provider.

Application means a request submitted by an applicant for a permit to (1) collocate small wireless facilities; or, (2) construct, install, maintain, operate, replace or modify a utility pole or wireless support structure.

City-owned pole means (1) a utility pole owned or operated by the City of Mauldin, and (2) a pole or similar structure owned or operated by the City of Mauldin that supports only wireless facilities. *Collocate* means to install, mount, maintain, modify, operate, or replace one or more wireless facilities on, under, within, or adjacent to an existing wireless support structure or utility pole within the jurisdiction of the City of Mauldin.

Person means an individual, corporation, limited liability company, partnership, association, trust, or other entity or organization.

Right-of-way means that area on, below, or above a public roadway, highway, street, sidewalk, alley dedicated to, managed or controlled by the City of Mauldin, Greenville County, or the State of South Carolina.

Small wireless facility or *small cell wireless facility* or *small cell facility* or *SWF* means equipment at a fixed location that enables wireless services between user equipment and a communications network, including: (1) equipment associated with wireless communications; and (2) radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration.

Utility pole means a pole or similar structure that is used in whole or in part for the purpose of carrying electric distribution lines or cables or wires for telecommunications, cable or electric service, or for lighting, traffic control devices, traffic control or directional signage, or a similar function regardless of ownership.

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Wireless infrastructure provider means any person, including a person authorized to provide telecommunications services in the State, that builds, installs or maintains utility poles, wireless communication transmission equipment, small wireless facilities or wireless support structures.

Wireless services mean any services provided using licensed or unlicensed spectrum, including the use of Wi-Fi, whether at a fixed location or mobile, delivered to the public using small wireless facilities.

Wireless services provider means a person who provides wireless services.

Wireless support structure or *support structure* means a freestanding structure, such as a monopole, or other existing or proposed structure designed to support or capable of supporting small wireless facilities.

44-4. Procedures.

A. Application

In accordance with federal and state law and City Code, an operator must apply to the City to locate a new small cell wireless facility and/or collocate any portion of a small cell wireless facility on an existing wireless support structure or to construct, maintain, modify, operate, or replace wireless support structures in, along, across, upon, and under the public rights-of-way within the City of Mauldin. Anyone seeking to perform any of these actions shall first duly file a written application with the City, in accordance with the requirements in this Ordinance and additional requirements set forth in any design guidelines as modified from time to time by the City.

Unless otherwise required by state or federal law, all applicants shall submit to the City all materials and information associated with each application as outlined below for the application to be considered complete:

- (1) The applicant's name, address, telephone number and e-mail address;
- (2) Facility owner's name, address, telephone number and e-mail address, if different from the applicant;
- (3) Intended facility use: owner operated or owner leased capacity;
- (4) The names, addresses, telephone numbers, and e-mail addresses, of all consultants, if any, acting on behalf of the applicant with respect to the filing of the application;
- (5) A general description of the proposed scope of work for the location or collocation of the small cell wireless facility;

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- (6) Verification that the small cell wireless facility shall comply with all applicable codes, including, but not limited to, this Ordinance, including without implication all applicable design guidelines;
- (7) Verification of payment of the annual municipal consent or administrative fee for telecommunications companies to use public rights-of-way pursuant to S.C. Code § 58-9-2230 and acknowledgement of its continuing annual obligation;
- (8) Verification of municipal business license, if applicable;
- (9) Evidence that the applicant is duly authorized to do business in South Carolina;
- (10) Evidence the applicant has received any necessary certificate of public convenience and necessity or other required authority from the South Carolina Public Service Commission or the Federal Communications Commission or evidence that it is not required;
- (11) A copy of an approved South Carolina Department of Transportation (SCDOT) encroachment permit and all documents required by SCDOT as part of the encroachment permit application, if the proposed location is within a SCDOT right-of-way; and
- (12) A statement that the applicant has a lease, attachment agreement or other authorization from the owner of the utility pole or structure proposed for collocation.

B. Consolidated Application for Multiple Small Cell Wireless Facilities

Applicants seeking to construct, modify, collocate, or replace more than one small cell wireless facility, may file, at the applicant's discretion, a consolidated application for up to 20 requests in a single application and receive a single permit for the construction, modification, collocation, or replacement of the small cell wireless facility subject to the following:

- (1) This single application may be filed for multiple small cell wireless facilities only if they are of substantially the same type.
- (2) The City must separately address small cell wireless facilities for which incomplete information has been received or which are denied and it must grant a permit for any and all sites in a single application that it does not deny subject to the requirements of this Ordinance.
- (3) In the case of a consolidated application, the fees shall be cumulative.

C. Fees and Costs

- (1) *Application processing costs.* Unless otherwise provided by law, including without limitation S.C. Code § 58-9-2230, all applications for permits pursuant to this Ordinance

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shall be accompanied by an application processing cost of \$100.00. Application costs for small wireless facilities applied for in a consolidated application shall be \$100.00 each for the first five (5) small wireless facilities and \$50.00 each for each additional small wireless facility.

- (2) *Annual rate.* Pursuant to S.C. Code § 58-9-2230, each individual applicant will be subject to an annual franchise or consent fee. The annual rate to place a small wireless facility on a City-owned pole shall be \$250.00 for each small wireless facility per year. This rate is in addition to reimbursement to the City for any expenses for make-ready work. The City reserves the right to require a pole attachment to further define the terms and conditions of attachments to City-owned poles.
- (3) *Make-ready reimbursement.* For City-owned poles, the applicant shall reimburse the City for expenses for any reasonable make-ready work, if any are required. The City shall provide a good faith estimate for any make-ready work necessary to enable the pole to support the requested small cell wireless facility, including pole replacement if necessary.
- (4) *Lawful fees and taxes.* In addition to the applicable fees as specified above, every permit shall include as a condition the applicant's agreement to pay such lawful franchise fees, business license taxes, administrative fees and consent fees as are permitted under applicable ad valorem taxes, service fees, sales taxes, or other taxes and fees as may now or hereafter be lawfully imposed on other businesses within the City.
- (5) *Cease payment following removal.* A wireless services provider is authorized to remove its facilities at any time from a City-owned pole and cease paying the annual rate to the City as of the next due date for payment following the removal, provided, however, the provider pay its pro-rata share of the remaining term and expenses, if any.
- (6) *Tax liabilities and assessments not applicable.* Placement of a small cell wireless facility in the public rights-of-way or attachment of any portion of a small cell wireless facility to a wireless support structure and any fees associated therewith shall not subject the City to any state or local tax liabilities or assessments.

D. Application Review

- (1) *Application completeness.* Shortly after receiving an application, the City will determine and notify the applicant whether the application is complete; or if an application is incomplete, the City will specifically identify the missing information.

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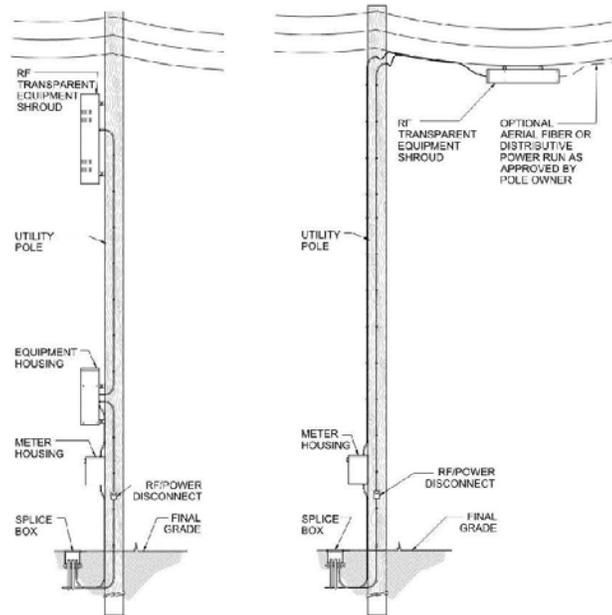
- (2) *Application review.* Absent an agreement to the contrary between the City and the applicant that is confirmed by e-mail or other writing, the City shall grant or deny an application according to its typical review timeframes.
- (3) *Application denial.* If an application is denied, the City will provide in writing its reasons for denying the request, including, if applicable, specific references to any applicable law supporting the denial.
- (4) *Application resubmittal.* Notwithstanding an initial denial, the applicant may cure the deficiencies identified by the City and resubmit the application to the City for further review.
- (5) *Removal of a small cell wireless facility.* The City shall act on requests to remove wireless support structures associated with a small cell wireless facility from the public rights-of-way in accordance with its typical review timeframes for the general right-of-way permit required for this activity.



44-5. Small Cell Wireless Facilities Types

There are four types of small cell wireless facilities permitted within the City of Mauldin.

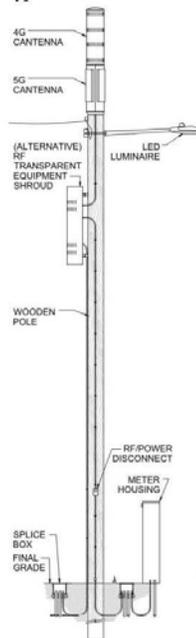
A. Type 1: Attachments to Utility Poles



Commented [TF1]: Is city asking for radios and antennas to be contained in the same shroud? This has not been done or designed before. We cannot deploy existing solutions based on this requirement.



B. Type 2: Small Cell Wireless Facility on Existing Wooden Pole with Streetlight

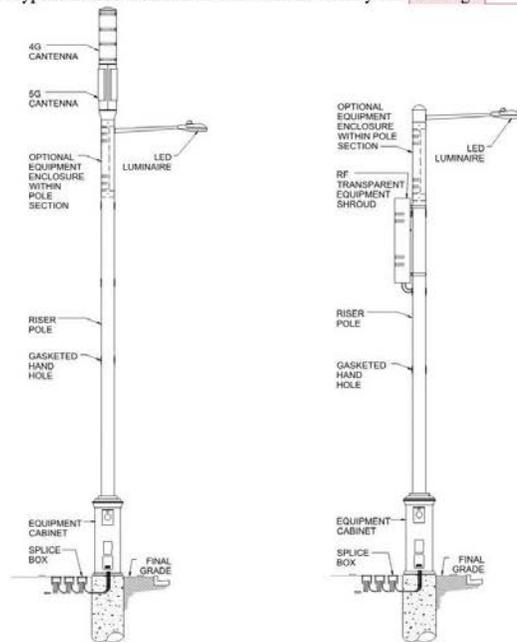




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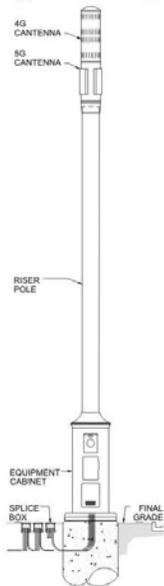
C. Type 3: Combination Small Cell Wireless Facility and Streetlight



Commented [TF2]: This is not a standard design. Will need to confirm these requirements are ADA compliance



D. Type 4: Freestanding Small Cell Wireless Facility Monopole Structure



E. Installation Type Preferences

- (1) The most preferred installation type is a collocation of an antenna and associated small cell facilities on an existing privately owned utility pole along a side street.
- (2) The least preferred installation type is a new freestanding small cell facility.
- (3) Existing decorative light poles are not permitted for collocations of small cell facilities due to the design aesthetics, height, and structure capacity of these fixtures.



- (4) In an effort to reduce congestion and clutter in the public right-of-way, applicants shall consider existing support structures prior to installing any new support structures.

44-6. Design Guidelines

The following standards shall apply to all small cell facilities within the public right-of-way throughout the City of Mauldin, unless otherwise noted.

A. Antennas

(1) Mounting Specifications

- (a) *Top-mounted.* Unless otherwise required by the owner of the pole, all antenna shall be top mounted to the top of the support structure pole, aligned with the centerline of the structure.
- (b) *No overhang.* No antenna shall overhang the roadway, sidewalk, or other travel way.

(2) Maximum Size

- (a) *Volume.* Each antenna shall be located entirely within a shroud, to the extent technically feasible, enclosure of not more than three (3) cubic feet in volume.
- (b) *Height.* No antenna shall exceed a height of 30 inches.
- (c) *Diameter.* The diameter of the antenna or antenna enclosure shall typically not exceed the diameter of the top of the support structure pole, and to the maximum extent practical, shall appear as a seamless vertical extension pole. In no case shall the maximum diameter of the shroud be wider than 1.25 times the diameter of the top of the pole. Where the maximum shroud diameter exceeds the diameter of the top of the pole, the shroud shall be tapered to meet the top of the pole.

(3) Design Specifications

- (a) *Shape.*
- (b) *Enclosure.* Antenna shall be completely housed within a cylindrical shroud that is capable of accepting paint to match the support structure.
- (c) *Color.* Color for all antennas and shrouds shall match the color of the support structure.

B. Associated Small Cell Facilities and Equipment

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- (1) Pole-mounted equipment shall only be installed when the applicant can demonstrate with clear and convincing evidence that other methods of equipment placement, such as underground installations and installations inside the pole, are not technically feasible or not potentially available.
- (2) Specifications
 - (a) *Maximum size.* Exclusive of the antenna, all wireless equipment associated with the small cell facility shall not cumulatively exceed twelve (12) cubic feet in volume.
 - (b) *No overhang.* No portion of a wireless support structure or small cell facility cabinet or enclosure shall overhang the roadway, sidewalk, or other travel way.
 - (c) *Color.* Color for all small cell facilities and enclosures/cabinets attached to wireless support structures or integrated within the transformer base shall match the color of the associated wireless support structure.
 - (d) *Hardware.* All hardware attachments shall be hidden.
 - (e) *Service lines.* All service lines from the power source to the small cell facilities and wireless support structure shall be located underground.
 - (f) *Wiring and cables.* All wiring and cables must be housed within the steel support structure or pole and extended vertically within a flexible conduit. Where not technically feasible or practical, all cables shall be in conduits and shall be flush with the pole. Exposed wires, cables, connections and external conduit are prohibited.
 - (g) *Excess wires and cables.* Spools and/or coils of excess fiber optic or coaxial cables or any other wires shall not be stored on the pole except completely within the approved enclosures or cabinets.

Commented [TF3]: May need additional clarification on this request.

Commented [TF4]: This is not a standard request in this area for small cells installations. Further discussion recommended.

Commented [TF5]: Not a standard request.

C. Small Cell Facilities Mounted to Wireless Support Structures

(1) Mounting Specifications

- (a) *Minimum clearance.* All small cell facilities mounted to wireless support structures shall provide a minimum clearance of 10 feet above established grade.
- (b) *Placement on pole.* All small cell facilities and equipment enclosures shall be mounted on the side of the pole opposite the direction of vehicular traffic of the adjacent roadway. Enclosures shall extend perpendicular from the pole and parallel to the right-of-way. Enclosures shall not interfere with existing brackets on poles.
- (c) *Flush mounting.* All pole-mounted equipment and enclosures shall be installed as flush to the pole as possible. In no case shall an enclosure be installed more than four (4) inches from the wireless support structure pole.

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- (d) *Maximum protrusion.* Small cell equipment enclosures shall not protrude more than eighteen (18) inches beyond the face of the pole to the outermost portion of the enclosure.
- (e) *Attachment method.* The shroud enclosure shall be securely strapped to the wireless support structure pole using stainless steel banding straps. Through-bolting, use of lag bolts, or welding on publicly-owned wireless support structures is prohibited. New wireless support structures may utilize mounting brackets in accordance with the maximum horizontal offset requirements. Care should be taken to integrate the mounting hardware into the enclosure design.
- (f) *Multiple enclosures.* Where multiple enclosures are proposed on a wireless support structure pole, the enclosures shall be grouped as closely together as possible on the same side of the pole. No more than two enclosures shall be mounted or attached to any individual pole.

Commented [TF6]: Very restrictive regarding concealment options and not a standard request.

(2) Design Specifications

- (a) *Size.* Small cell equipment enclosures shall be the smallest size practicable to house the necessary small cell facilities and equipment.
- (b) *Shape and width.* Small cell equipment enclosures shall be cylindrical or curved in shape, and shall generally be no wider than the maximum outer diameter of the pole to which it is attached, to the maximum extent possible.



- (c) *Concealment of gap.* Metal flaps or “wings” shall extend from the enclosure to the pole to conceal any gap between the enclosure and the pole. The design of the flaps shall be integrated with the design of the enclosure.

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- (d) *Color.* All small cell equipment enclosures shall be painted to match the color of the associated wireless support structure. On a wood pole, the enclosures and hardware shall be colored gray.

(3) City-Owned Support Structures

- (a) *Agreement.* The City, in its proprietary capacity, retains sole and absolute discretion over whether and on what terms it may allow small cell facilities on its structures. Applicants shall provide a valid and fully executed agreement to use any City-owned support structure.
- (b) *Power supply.* Small cell facilities located on City-owned structures shall not use the same power or communication source providing power and/or communication for the existing facility original to the purposes of the structure. The independent power source must be contained within a separate conduit inside the support structure. The applicant shall coordinate, establish, maintain and pay for all power and communication connections with private utilities.
- (c) *Power disconnect.* The City reserves the right to disconnect power to the radio when working on the structure. The applicant shall provide a disconnect so the City has the ability to easily shut off radio signals and power while working on the structure.

D. Ground Mounted Equipment Cabinets

(1) Design Specifications

- (a) *Cabinet.* Ground-mounted equipment shall be concealed within a single shroud or cabinet and shall contain all the equipment associated with the facility other than the antenna.
- (b) *Installation types.* Ground-mounted equipment may only be installed in the following applications: (1) concealed within the pole, (2) placed within a cabinet integrated in the base of the pole, (3) in an existing above-ground cabinet, or (4) placed in a flush-to-grade underground equipment vault.
- (c) *Color.* Color for all ground-mounted cabinets shall match the pole color.
- (d) *Shape.* Equipment cabinets integrated in the base of the pole shall be cylindrical.
- (e) *Size.* Equipment cabinets integrated in the base of the pole shall not exceed a diameter of eighteen (18) inches. Where the diameter of the cabinet exceeds the diameter of the pole, the transition between the cabinet and the pole shall be tapered.
- (f) *Conduits.* All cables and conduits associated with the equipment shall be concealed from view and shall be underground between the pole and the ground-mounted cabinet.

Commented [TF7]: We are wireless service provider and disconnecting our power without appropriate notification will impact customers. Can we provide alternate language.

Commented [TF8]: This will limit Verizon's ability to deploy network appropriately with this restriction for ground mounted equipment.

Commented [TF9]: Limiting dimension of ground mounted shroud is not standard and will not allow for effective deployment.

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(g) *Owner identification.* A maximum four (4) inch by six (6) inch plate with the Carrier's name, location, identifying information, and emergency telephone number shall be permanently fixed to the cabinet on the side of the cabinet opposite the direction of vehicular traffic to the adjacent roadway.

(2) Placement Specifications

(a) *Sight triangles.* Ground mounted equipment cabinets shall comply with the City of Mauldin regulations regarding sight distance triangles.

(b) *No obstructions.* Ground mounted equipment cabinets shall be located so as to avoid any physical or visual obstruction to pedestrian or vehicular traffic or any other location that would create safety hazards to pedestrians, cyclists, or motorists.

E. New Wireless Support Structures

(1) New wireless support structures shall only be constructed when the applicant can demonstrate with clear and convincing evidence that using an existing structure is not technically feasible or not potentially available.

(2) Placement Specifications

(a) *Alignment with existing features.* New wireless support structures shall be located in alignment with existing trees, facilities, support structures, tower, utility poles, and streetlights, and are to be spaced evenly between any of these other objects.

(b) *Alignment with property lines.* New wireless support structures shall be aligned as close as practicable with adjacent side property lines, or with shared wall locations in adjacent multi-tenant structures.

(c) *Storefronts and signs.* In no case shall a wireless support structure be sited directly in front of an adjacent building entrance or storefront. Special care shall be taken to avoid siting wireless support structures in conflict with business signs.

(d) *Spacing from existing poles.* New wireless support structures shall be spaced a minimum of 250 feet from any existing poles including, but not limited to, utility poles, street light poles, and traffic signal poles.

(e) *Sight triangles.* New wireless support structures shall not be sited in conflict with required intersection sight distance triangles.

(f) *Setback from intersections.* New wireless support structures shall be setback at least 100 feet from any public street intersection measured from the closest edge of the street.

(g) *Setback from driveways.* New wireless support structures shall be located a minimum of twenty (20) feet from driveway aprons.

Commented [TF10]: burden of proof is overly burdensome, request revision to include an affirmative preference for collocations and certification that good faith efforts were made to collocate.

Commented [TF11]: Spacing and setback requirements for the public right-of-way are overly restrictive and effectively prohibits new poles in the ROW. We request relaxing these requirements in favor of general principles of public safety, no overcrowding, and compliance with the city's tree code.

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- (h) *Setback from trees.* New wireless support structures shall be located a minimum of fifteen (15) feet from all trees to prevent disturbance within the critical root zone of any tree.
 - (i) *Setback from sidewalks.* New wireless support structures shall be located a minimum of two (2) feet from any sidewalk edge or other walkway.
 - (j) *Setback from roadways.* New wireless support structures shall be located a minimum of four (4) feet from any road pavement edge.
 - (k) *Setback from objects.* New wireless support structures shall be located a minimum of six (6) feet from any other permanent object, such as fire hydrants, or existing lawful encroachment in the right-of-way to allow for access.
 - (l) *No obstructions.* New wireless support structures shall be located so as to avoid any physical or visual obstruction to pedestrian or vehicular traffic or any other location that would create safety hazards to pedestrians, cyclists, or motorists.
- (3) Maximum Size
- (a) *Height.* New wireless support structures and antennas shall be no taller than functionally necessary, and coordinate with the height of existing poles in the same right-of-way to the maximum extent practicable. If a compatible height cannot be clearly determined, then a maximum pole height of 50 feet above grade shall be used.
 - (b) *Diameter.* Pole diameter shall be consistent with the surrounding poles.
- (4) Design Specifications
- (a) *Generally.* New poles shall match existing poles in appearance, height, design, and material as those used on the same section of street. However, where requirements herein represent a higher standard, the higher standard shall apply.
 - (b) *Color.* Color for new wireless support structures shall match the color of existing poles in the same right-of-way to the maximum extent practicable. In the absence of existing poles, the color shall be a black powder coated finish.
 - (c) *Shape.* New poles shall be cylindrical in shape.
 - (d) *Material.* New poles shall be constructed of metal. Wood poles shall be prohibited.
 - (e) *Equipment cabinet.* All small cell carrier equipment shall be housed internal to an equipment cabinet at the base of the pole or otherwise hidden inside the pole.

Commented [TF12]: Height requirements - 30' is overly restrictive and not compliant with the FCC Order that allows up to 50'

Commented [TF13]: wood poles are prohibited but should be allowed to blend in with surrounding areas with existing wood poles.

F. Minimum Spacing and Maximum Number

_____ Blockface Number of Small Cell _ Minimum Distance Limit per Carrier

Commented [TF14]: This section is overly restrictive and has the effect of discriminating against wireless providers as to other utilities in the ROW. Recommend adjusting or eliminating this table. Any such spacing considerations should also provide for an administrative waiver process.



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Length Intervals Facilities Permitted between Facilities on the per Block⁴
(in feet)¹ per Blockface² Same Blockface (in feet)³

0 – 150	1	N/A	1
151 – 300	2	60	1
301 – 450	3	60	1
451 – 600	4	60	1
601 – 750	5	60	2
Over 750	6	60	2

¹ Block lengths shall be measured along the edge of curb between the edge lines extended of adjacent intersecting streets.

² This is inclusive of all types of installations and regardless of carrier.

³ In other words, the minimum distance between two facilities sharing the same side of the block. Distance shall be measured in a linear fashion along the edge of curb between two facilities' center points.

⁴ A block is defined as two opposing blockfaces.

G. Removal of Small Cell Facilities and Wireless Support Structures

(1) Remediation

(a) *General area.* Applicants shall restore all areas of the right-of-way impacted by the small cell facilities and/or wireless support structure installation and/or removal to equal or better condition.

(b) *City-owned structures.* All City-owned support structures shall be returned to an equal or better state, upon removal of small cell facilities. All mounting hardware and equipment shall be removed from the site. All holes left in the pole shall be neatly sealed from any moisture intrusion and painted to match the pole.

(b) H. Other Small Cell Facilities Requirements

(1) Lighting

(a) Lighting association with small cell facilities is prohibited. Any internal lights associated with electronic equipment shall be shielded from public view. This provision shall not be interpreted to prohibit the installation of luminaires on new poles.

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Commented [TF15]: Would this preclude street light support structures? If so, consider revising, as such structures allow for design options that better blend with areas with existing street lights.

Building Codes Committee Meeting



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(2) Noise

- (a) Noise produced by small cell facilities shall not exceed 5dBA above ambient sound. Other noise regulations may apply.

(3) Labels and Signage

- (a) *Owner identification.* A maximum four (4) inch by six (6) inch plate or label with the Carrier's name, location, identifying information, and emergency telephone number shall be permanently affixed to the small cell equipment enclosure on the side of the enclosure opposite the direction of vehicular traffic of the adjacent roadway. ID labels shall use background colors that match the color of the enclosure to which the label is affixed.
- (b) *RF warning sticker.* A maximum four (4) inch by six (6) inch sticker shall be affixed to the small cell facility on the side of the facility opposite the direction of the adjacent roadway as may be required by government or utility regulations. Stickers shall use background colors that match the color of the facility to which the label is affixed.
- (c) *Signage.* Signage is prohibited on all small cell facilities and wireless support structures, including stickers, logos, text, and other non-essential graphics and information other than the owner identification unless required by FCC.

(4) Prohibited Wireless Facilities

- (a) Microwave, macro towers, and other wireless facilities are not permitted within the right-of-way.

Commented [TF16]: This is governed by the state's and local government's franchise agreements, particularly those wireless providers that have the right to locate backhaul as a public utility under SC law.

(5) Engineering

- (a) All small cell facilities and wireless support structures can have a significant structural, wind and other loading impact. All small cell facilities attachments and new wireless support structures shall be properly engineered to assure safety.
- (b) All structural components of small cell facilities and wireless support structures shall be designed for a minimum of 115 MPH wind velocity in accordance with applicable standards.

(6) Health and Safety

- (a) All small cell facilities and wireless support structures shall be designed, constructed, operated, and maintained in compliance with all generally applicable

Commented [TF17]: this provision includes an overly restrictive requirement that effectively imposes local regulation of RF Emissions that are regulated exclusively by the FCC. This section should be replaced with a general statement of compliance with all applicable FCC regulations. We can also agree to provide a certification of compliance.

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health and safety regulations, including without limitation all applicable regulations for human exposure to radiofrequency (RF) emissions.

(b)

This ordinance shall become effective upon and after its final passage.

Passed on First Reading: _____

Passed on Second Reading _____

CITY OF MAULDIN, SOUTH CAROLINA

BY: _____

Terry Merritt, Mayor

ATTEST:

_____ Cindy

Miller, Municipal Clerk

Commented [TF18]: Not a requirement for small cells

Building Codes Committee Meeting



City Council Meeting



APPROVED AS TO FORM:

John Duggan, City Attorney



SMALL CELL PROJECT

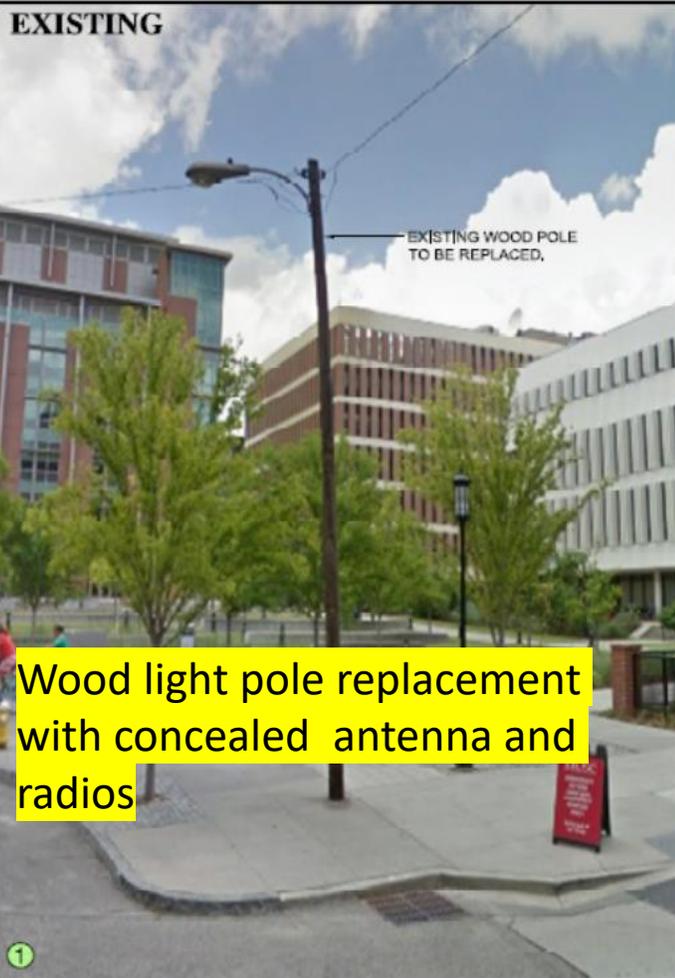
CRAN_RGSC_CHARL_028

98 JONATHAN LUCAS ST.
CHARLESTON, SC 29425



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DRAWN BY:	JG
FA #:	14819901
PHOTOSIM DATE:	11-25-19
MNS PROJECT NO.:	17080



Photosimulation Viewpoint





**Site is located on Smith Hines
Road in Greenville**

**Wood pole
concealed antenna**



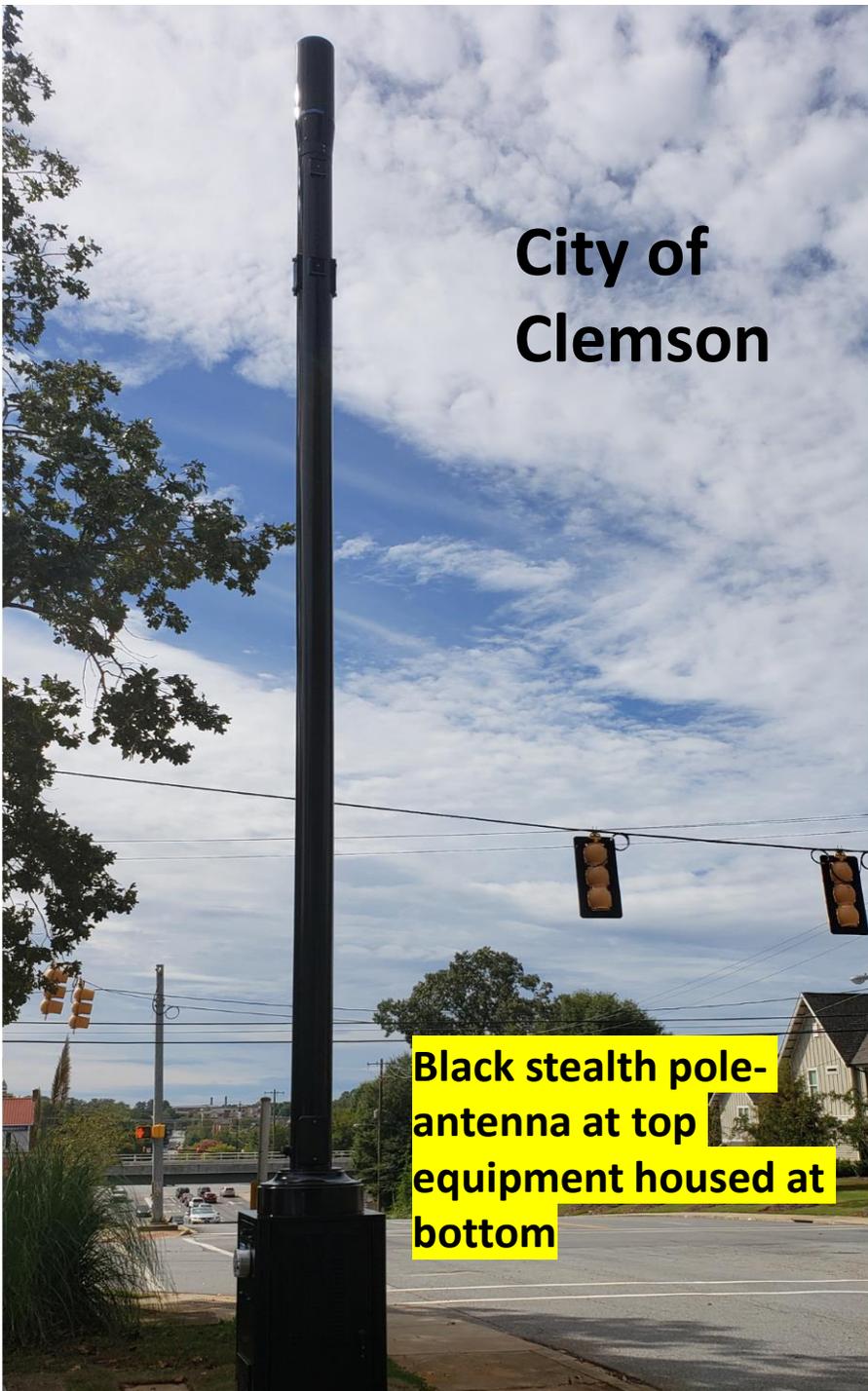
Brookfield Parkway Mauldin

Black stealth pole- antenna and radios top

Clemson University

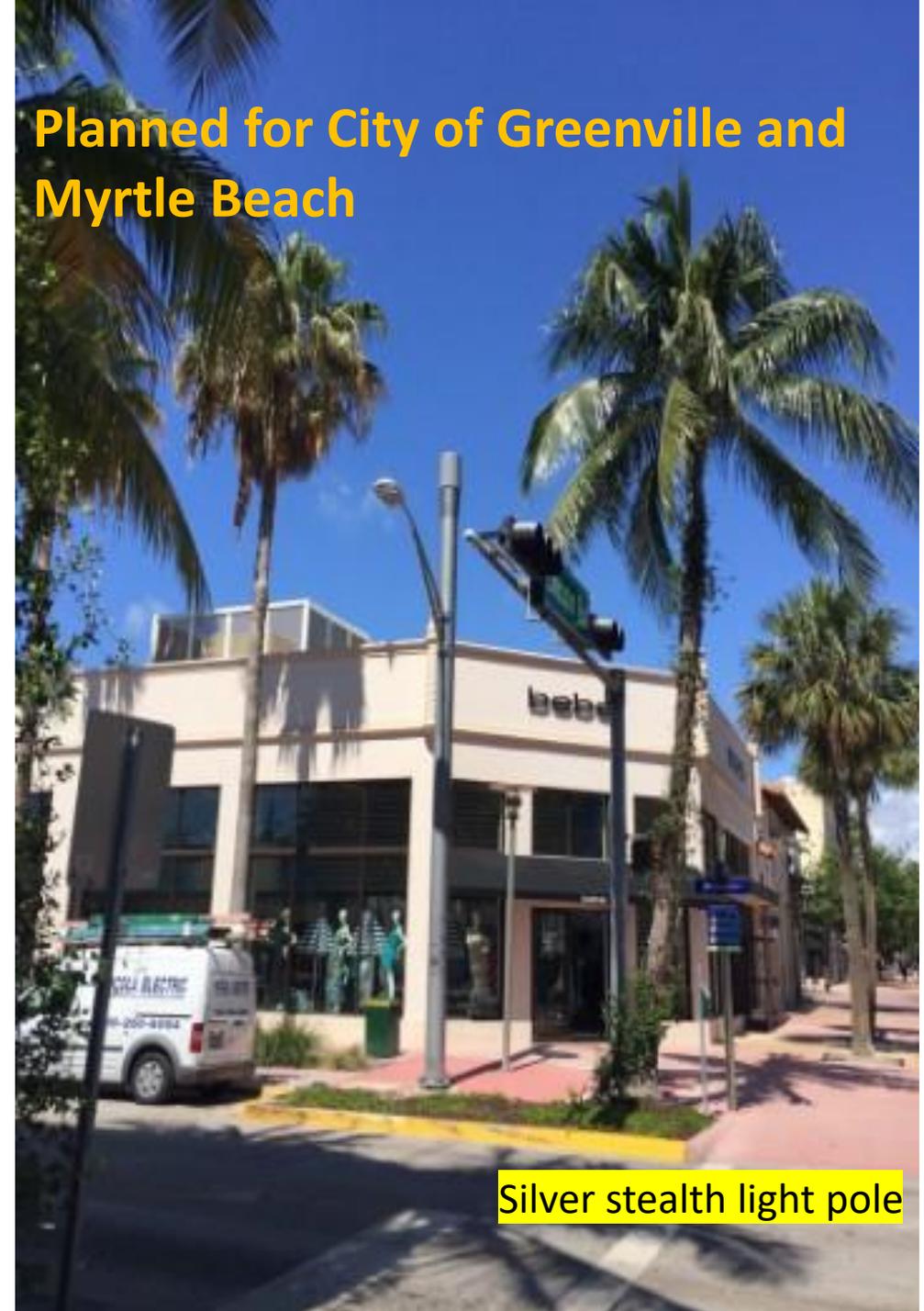


Silver stealth light pole replacement



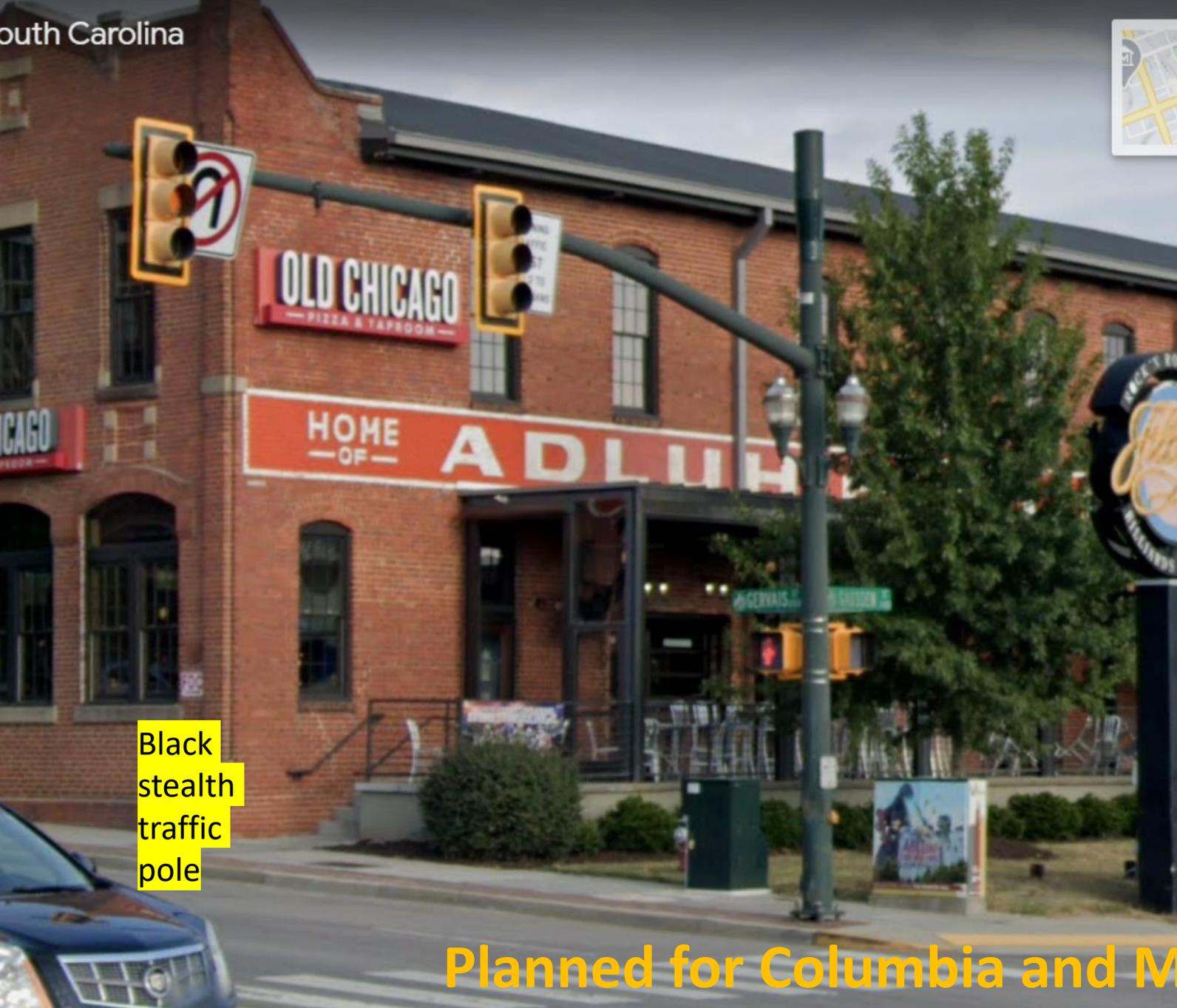
**City of
Clemson**

**Black stealth pole-
antenna at top
equipment housed at
bottom**



**Planned for City of Greenville and
Myrtle Beach**

Silver stealth light pole



Black stealth traffic pole

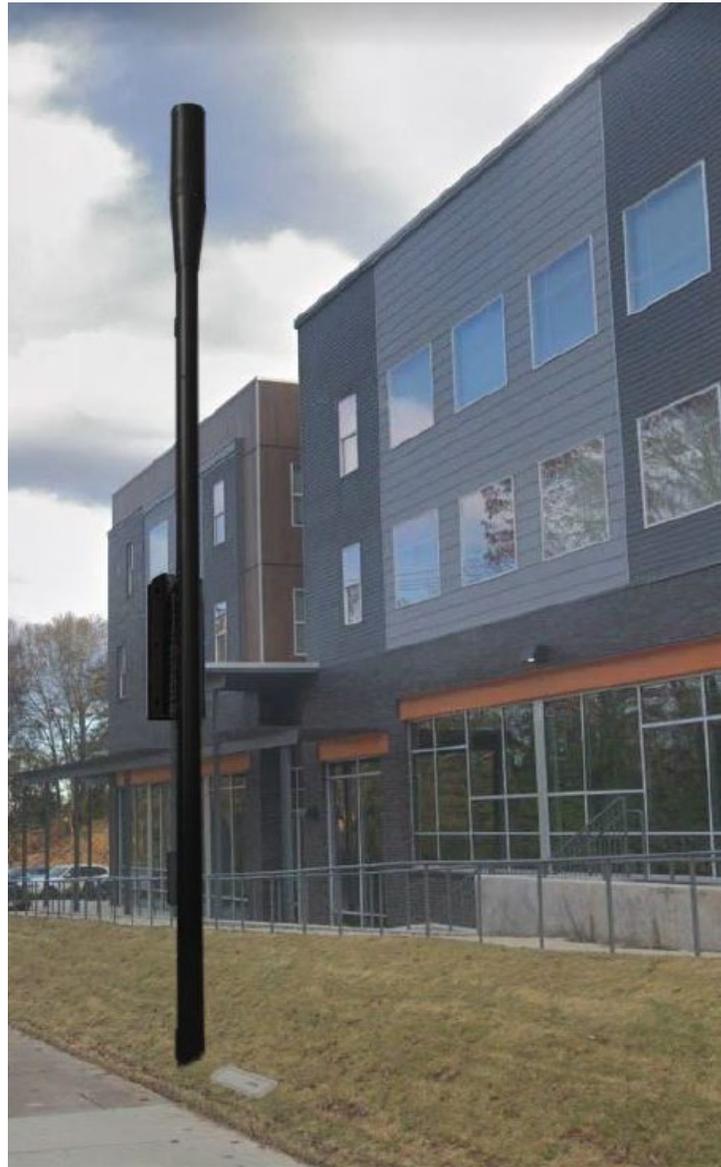
Silver stealth twin light pole

Planned for Columbia and Myrtle Beach

What will it look like? 4G Metal



Black Metal Verizon/Utility Collocation



Black Metal Verizon New Pole PhotoSIM

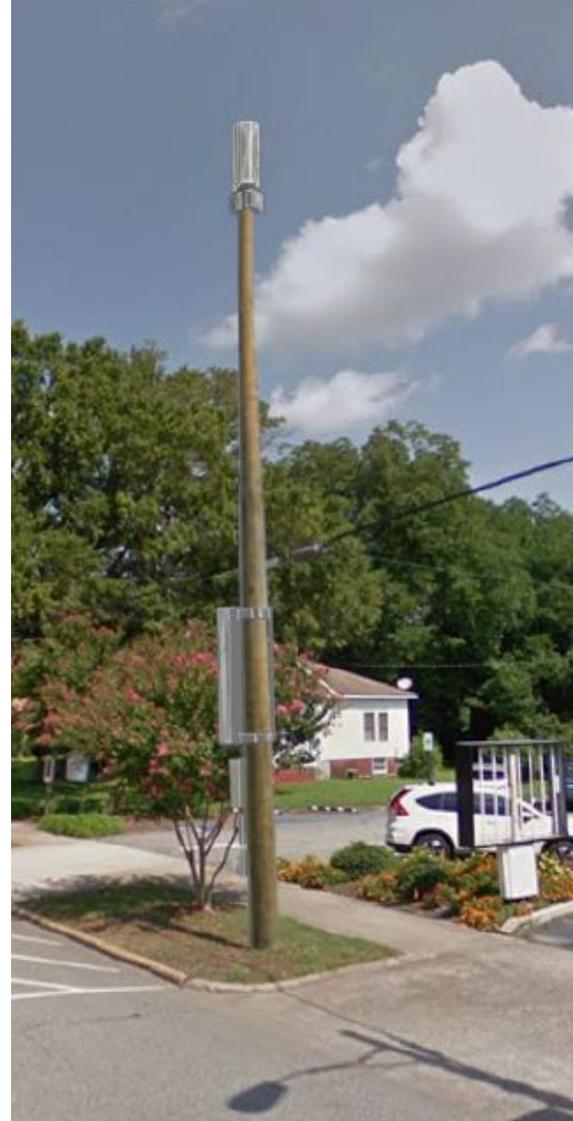


Black Metal Verizon New Pole

What will it look like? 4G Wood



Verizon Wood Pole



Verizon/Utility Wood Pole
Collocation PhotoSIM

Pole Designs

- Multiple Color Options Available for Metal Poles
- Multiple Wraps/Paint for equipment and antenna
- Designed to match surrounding poles and utilities