AGENDA ITEM #4B
May 15, 2018

Action

MEMORANDUM

May 11, 2018

TO: County Council

FROM: Jeffrey L. Zyontz, Senior Legislative Analyst

SUBJECT: Zoning Text Amendment 18-02, Telecommunications Towers – Limited Use

PURPOSE: Action to approve or revise the Committee recommendations on ZTA 18-02

PHED Recommendation: The Committee recommended approval of ZTA 18-02 (3-0) with amendments. The Committee recommended retaining all of the current setback and building height standards for antennas on existing facilities in residential zones and adding provisions that will require compatible antenna enclosures where antennas are allowed. The ZTA would allow more permissive standards for antennas where they are currently allowed as a limited in Commercial/Residential, Industrial, and Employment zones. The Committee also recommended several editorial changes.

A majority of the Committee recommended lowering the maximum allowable tower heights for new towers that require conditional use approval (2-1, Councilmember Leventhal would have deferred this item; he favored a separate ZTA concerning residential zones).

Specific revisions recommended in the attached draft include:

Line(s)	Revision
78, 302, 307, 320	Enclosures required.
80	Minimum height of 15 feet added.
89, 93	DPS replaces DOT.
145	Antenna owners AND tower owners are responsible for maintaining their facilities.
173	"From the property line" deleted from the section concerning single-unit zones.
300	A minimum 50-foot height of buildings is retained.
324	A 60-foot setback is retained in single-family zones.

Expected to attend:

Joy Nurmi, Special Assistant to the County Executive
Mitsuko Herrera, Project Director, UltraMontgomery
Marjorie Williams, Chair, Office of Cable and Broadband Services
Diane Schwartz Jones, Director, DPS
Rick Brush, Chief, Land Development Division, DPS
Pam Dunn, Chief, Functional Planning and Policy (FP&P), M-NCPPC
Greg Russ, Planner Coordinator, FP&P, M-NCPPC

Background

Zoning Text Amendment (ZTA) 18-02, lead sponsor Council President at the request of the County Executive, was introduced on February 13, 2018. ZTA 18-02 would amend zoning regulations related to the placement of telecommunications antennas in non-residential zones and the provision for antennas on existing structures in all zones. The ZTA proposed by the Executive is modest in comparison to ZTA 16-05, which was previously introduced. At this time, no further Council action is scheduled on ZTA 16-05.

The changes proposed by ZTA 18-02 are less extensive than the changes that were proposed by ZTA 16-05. ZTA 18-02, as introduced, would retain the current requirements for allowing new poles in residentially-zoned areas (no changes to setbacks, notice, hearings, and findings for approval). Maximum tower heights would be lowered under the proposed ZTA.[1]

There are new regulations in ZTA 18-02 concerning utility poles (poles that support electric wires). Height increases for antennas on replacement utility poles along narrower streets are limited to 10 feet higher than the pre-existing pole. The current code allows large antennas on existing structures near detached dwellings, but requires a 60-foot setback for smaller antennas. The proposed ZTA would reduce the setbacks for smaller antennas on existing structures from 60 feet to 20 feet. Antennas are and would be prohibited on detached dwellings. The minimum height of other existing non-residential structures that may have antennas would be reduced from 50 feet to 35 feet and from 30 feet to 20 feet in multi-family, mixed-use, and employment zones.

The more significant changes proposed by the Executive would be in non-residential zones. The rules for replacement poles in these zones would be established under the ZTA. There are new standards for the pole and any equipment cabinet. Replacement poles with antennas on narrower streets (65 feet or less of paved width) are limited to 6 feet higher than the pole being replaced. When the paved width is more than 65 feet, the existing pole height plus 15 feet would be allowed. There are design requirements and Department of Transportation approval for safety is required.

Special Considerations for Health Concerns

The public hearing and testimony submitted to the record were opportunities for people to comment on the proposed ZTA. All speakers had a First Amendment right to say whatever they wished. Unlike most

[1] Currently, a new tower with conditional use approval is allowed to be a maximum height of 199 feet. ZTA 18-02 would lower that to 179 feet. The FCC considers any 20-foot addition in height to a tower outside of a right-of-way as automatically allowable. This FCC rule prevailed over the County's court challenge in the 4th Circuit Court of Appeals; Montgomery County, et. al. v. FCC, 2015.

other topics of legislation, the Council is preempted by Federal law with respect to the basis for its decision. Federal law states:

> *No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.*[2]

The County is bound by the 4th Circuit Court of Appeals holding in T-Mobile Northeast LLC v. Loudoun County Board of Supervisors.[3] That decision, in part, overturned the Supervisors' denial of a cell tower when the Supervisors' rationale for the denial included the human health effects of the radio frequency emissions.

The federal act does not prohibit citizens from expressing their concerns about health effects; however, it prohibits the Council from acting on those concerns. Congress has delegated the authority to establish health safety measures for radio frequencies to the Federal Communications Commission (FCC).[4] The Executive and Council President Riemer met with the Chair of the FCC and asked for the Commission to update its federal health studies, given the new range of spectrum and power levels. The FCC has not sought or reviewed any new studies to update their health effects findings.

Possible FCC and State Preemption

Senator Middleton introduced Bill SB1188 in the Maryland Senate that would have preempted the County for almost all zoning regulations regarding small cell facilities. The Senate hearing on the Bill was canceled. No action on the Bill was taken during the 2018 session of the General Assembly.

The FCC has preempted local jurisdictions with regard to: 1) prohibiting or effectively prohibiting wireless services; 2) the maximum time a jurisdiction can take to approve or deny a permit application; and 3) defining what must be allowed as an insignificant change to a wireless facility. The FCC, at the request of the wireless industry, is considering additional federal rule-making that would preempt local

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[2] 47 U.S.C. § 332(c)(7)(B)(iv).

[3] 748 F.3d 185 (2014). The County is in the jurisdiction of the 4th Circuit in the federal system. The Court of Appeals is the highest federal court in our circuit. Its rulings apply to the County unless the Supreme Court overrules their decision. There were dicta in a case decided by the 2nd Circuit Court of Appeals that biological effects were included in the term "environmental effects", but the case was decided on the basis of preemption concerning radio frequency interference. *Freeman v. Burlington Broadcasters, Inc.*, 204 F.3d 311 (2000). There was a later District Court case in the 2nd Circuit that squarely ruled that environmental effects included health effects. "Environmental effects within the meaning of the [federal law] provision include health concerns about the biological effects of RF radiation." *T-Mobile Northeast LLC v. Town of Ramapo*, 701 F.Supp.2d 446 (2009). That phrase was repeated in the holding of *T-Mobile Northeast LLC v. Town of Islip*, 893 F.Supp.2d 338 (2012). Where a decision to deny a cell tower was solely based on the alleged adverse health effects of radio frequency emissions, the District Court overturned the denial. *SPRINTCOM, Inc. v. Puerto Rico Regulations and Permits*, 553 F.Supp.2d 87 (2008).

[4] The FCC is required by the National Environmental Policy Act of 1969, among other things, to evaluate the effect of emissions from FCC-regulated transmitters on the quality of the human environment. Several organizations, such as the American National Standards Institute (ANSI), the Institute of Electrical and Electronics Engineers, Inc. (IEEE), and the National Council on Radiation Protection and Measurements (NCRP) have issued recommendations for human exposure to RF electromagnetic fields. On August 1, 1996, the Commission adopted the NCRP's recommended Maximum Permissible Exposure limits for field strength and power density for the transmitters operating at frequencies of 300 kHz to 100 GHz. https://www.fcc.gov/general/radio-frequency-safety-0.

government from establishing wireless application and right-of-way fees. It is likely that any additional federal preemption by the FCC would promote litigation, particularly if it is preempting State legislation.[5]

Planning Board and Planning Staff Recommendation

The Planning Board agreed with the recommendation of Planning staff that ZTA 18-02 should be approved as introduced. In the opinion of Planning staff, ZTA 18-02 strikes a balance in addressing the community's interest in having increased access to mobile broadband services and the evolving technical needs of the wireless industry while also working to protect the community's interest in managing commercial use of public property and maintaining attractive and safe roads and neighborhoods. Planning staff recommended approval of ZTA 18-02 as introduced.

Public Hearing

The Council conducted a public hearing on April 3, 2018. Thirty-five speakers signed up to speak. Ten who signed up to speak did not attend the hearing and an eleventh attended but did not speak. The testimony was split between support and opposition, with a majority of those speaking opposed to the approval of ZTA 18-02. Generally, industry representatives and non-residential interests (Chambers of Commerce, T-Mobile, and Crown Castle) favored the approval of ZTA 18-02. Other speakers (the Town of Somerset, the Civic Federation, and individuals) opposed the ZTA. Proponents cited increasing needs for wireless bandwidth for businesses, customers, and E-911 communications. Business interests cited the competitive advantage achieved by jurisdictions with superior wireless service.

Outside of numerous statements about the health effects of radio frequency antennas, most opposition objected to reducing the setback required between existing structures and houses from 60 feet to 20 feet. Some testimony called for 1,500-foot setbacks from schools. There was some opposition to adding Telecommunications Tower as a limited use in the CRN, CRT, CR, and LSC zones because the new limited use (and where an existing limited use is allowed) would not afford the public adequate notice and an opportunity to contest the tower. An issue concerning reduced property values was raised by testimony. Some opponents questioned whether wireless companies had sufficient liability coverage given their potential risks. Some who testified cited the County's lack of capacity or commitment to regulating antennas (and towers) once they are approved for construction as a reason to oppose ZTA 18-02. One opponent wanted to see the regulatory requirements of other jurisdictions before recommending any action.

Executive Staff Response to Public Hearing Testimony

On April 30, Staff received an amendment proposed by Executive staff to respond to testimony at the public hearing. Those recommendations are attached to this memorandum.

[5] In State of Tennessee, et. al. v FCC (2016), the U.S. Court of Appeals for the 6th Circuit held that federal preemption against a State must be explicit in federal law.

Issues

How do wireless facilities compare to public utilities?

Full public utilities are regulated by the Maryland Public Utility Commission with regard to fees and service coverage. Utilities may be in public rights-of-way by virtue of state public utility law. Wireless companies are allowed in public rights-of-way by virtue of County franchise agreements. Wireless facilities are not regulated as to fees and service coverage.

Why is there any need to change standards for wireless facilities?

The core of County zoning regulations is based on infrequent tall towers 90 to 199 feet tall. Most tall facilities have coverage measured in miles. The wireless industry is moving to distributed antenna systems (DAS) that require relatively short poles, but the range of each antenna is measured in feet so many more antennas are required. (DAS systems are anticipating the radio frequency and power standards for 5G technology.)

Should certain telecommunications towers be allowed as a limited use in the CRN, CRT, CR and NR zones under certain circumstances?

These zones are all mixed-use or commercial zones. As a limited use, the "tower" must replace a pre-existing utility pole, streetlight pole, or site plan-approved parking lot pole. There are numerous proposed standards for these replacements.

Location

- Within 2 feet of the pre-existing pole, at the same distance from the curb line or edge of paving
- At least 10 feet from an existing building
- Outside the roadway "clear zone" as determined by DOT
- Allows for adequate site distance
- Complies with streetlight maintenance requirements

Height

- The height of the pre-existing pole plus 6 feet if paved width of the abutting road is 65 feet or less.[6]
- The height of the pre-existing pole plus 15 feet if paved width of the abutting road is more than 65 feet.

Pole Design

- Same color as the pre-existing pole
- No exterior wiring except conduit of wooded utility poles
- No illumination unless FCC-required

Equipment cabinet design must be in the base of the tower or on the ground

- Maximum 12 cubic feet

[6] Under FCC rules, the tower or base station height, once established, can increase by 10 feet in a right-of-way without being considered a "Substantial Change". Executive staff does not believe that the ZTA should be amended beyond the lower height limits added for new towers at lines 54, 60, and 65. Where the ZTA is authorizing additional height for replacement poles, the Executive would not make further amendments to lines 102-111.

- Same color as the pre-existing pole
- May be stealth design if approved by DOT
- Noise level of any fans must comply with Chapter 31B

Maintenance

- Safe condition, graffiti- and damage-free
- If unused for 12 months...removal unless it supports a streetlight

Currently, telecommunications towers (new structures) are not an allowable use in the CRN, CRT, CR or CR zone. Antenna on Existing Structure is an allowable accessory commercial use. The Executive recommended allowing new replacement poles in the right-of-way for these zones. The proposed ZTA includes restrictions on the height of **new** utility poles when the height is increased for the purpose of providing a wireless antenna.

Testimony objected to any wireless communications use unless the facility could only be approved as a conditional use. The conditional use approval process requires notice, a quasi-judicial hearing before the Hearing Examiner, and compatibility findings. Those who supported this idea did so without regard to how short the pole is or how comprehensive the design standards are. The opportunity to review and potentially oppose individual towers is fundamental to these residents. It would not matter to these residents that the wireless facility is located on an existing structure. These residents want to maintain, if not expand, the circumstances under which a conditional use is required for a wireless facility.[7] In the alternative, some residents recommend extreme setbacks for these facilities.

Avoiding pole proliferation

Currently, telecommunications towers are allowed as a limited use in the AR, R, RC, GR, EOF, and all industrial zones. The "expansion" of the limited use in mixed-use and employment zones under ZTA 18-02 would not add new poles in the landscape.

The changes to allow Telecommunications Tower as a limited use in ZTA 18-02 would make existing poles dual purpose (e.g., street light and wireless facility). Physically, the pole would have more bulk, its shadow would be increased, and it may have equipment at its base. Under the current code, these facilities are already allowed on existing structures as a limited use. As reported previously, there is testimony that recommended prohibiting any telecommunications towers as a limited use.

As introduced, ZTA 18-02 would require the removal of a pre-existing utility pole within 180 days after a replacement utility pole is installed. PEPCO asked for a change to this text:

> ....compliance with this requirement is beyond our ability to control, and Pepco therefore respectfully requests that the language be amended to provide that *the owner must remove the pre-existing utility pole within 30 days after receipt of notice from the last telecommunications provider remaining on the pre-existing pole that its facilities have been moved to the replacement utility pole.* [emphases added]

[7] Very few uses require a conditional use under all circumstances in every zone where it is allowed: Major Home Health Practitioner, Major Home Occupation, Community Swimming Pool, Cemetery, Golf Course Country Club, Shooting Range, Rural Antique Shop, Rural Country Market, Amateur Radio Facility over 65 feet, and Filling Station.

We understand that double poles are an eyesore and we work with the community and the various entities that have facilities attached to our pole -- including Montgomery County, Comcast, Verizon, RCN, and others -- in a collaborative effort to address this matter. However, after we install a new pole, we cannot remove the old pole until all of the telecommunications providers move their equipment to the new pole. When a new pole is installed, we notify the telecommunications provider that they need to move their equipment. We are in daily contact with these entities and we share information on the status of facility relocation. When the first telecom provider moves its facilities to the replacement pole, it notifies the "next in line" provider, as well as Pepco and the others on the pole. When the last remaining provider moves its facilities to the replacement pole, it notifies the pole owner that the old pole is ready to be pulled.

Because the timing of facility relocation is up to the telecommunications providers, the owner may not be in a position to remove the pre-existing pole within 180 days after a replacement pole is installed. The proposed amendment recognizes this and provides a reasonable time for the owner of the pre-existing pole to schedule a contractor to pull the pull after all equipment has been relocated.

The Executive has not changed his recommendation. **The Committee did not recommend changing this provision; neither does Council staff.**

Pole design

Courts have criticized approvals based on subjective aesthetics.[8] ZTA 18-02 gives objective standards to design. It would require a replacement pole to be the same color as the pre-existing pole. It would prohibit exterior wiring, except conduit of wooded utility poles. It would also prohibit illumination unless FCC-required. Any equipment cabinet would be required to be in the base of the pole or at ground level. The initial height would be limited to 6 feet higher than the pole it is replacing along narrower roads and 10 feet higher along wider roads. These criteria are intended to avoid the need for a subjective determination of compatibility by a hearing examiner.

Executive staff recommends amending lines 76-78 in ZTA 18-02 to require an enclosure:

> Antennas must comply with the Antenna Classification Category A under Section 59.3.5.2.C.1.b, be concealed within an enclosure the same color as the pole to minimize visual impact, be installed at a minimum height of 15 feet, and **[[**must**]]** be installed perpendicular to the ground;

As a technical correction in lines 89 and 93, the Department of Transportation should be deleted and the Department of Permitting Services should be added in its place. (DPS issues right-of-way permits.) An additional technical change is recommended for line 145 to make the owner of the tower responsible for maintenance, not the antenna's owner.

The Committee agreed with these proposed revisions except for the orientation of the antenna.

As introduced, an antenna on a new street light pole would be allowed to be 6 feet higher than the height of the pole it is replacing. Executive staff recommended revising lines 106-107 to allow the greater of 6 feet more or 20 feet total, whichever is higher. **The Committee did not agree to amend the ZTA in this regard.**

[8] Coscan Washington, Inc. v. M-NCPPC, 590 A.2d 1080 (1991).

Standards v. Conditional Use Approval

Staff would not recommend that these provisions be made conditional use. The standards should be able to address any concerns that the Council may have.

Would ZTA 18-02 affect the approval of new (including replacement) poles in residentially-zoned areas?

The only effect of ZTA 18-02 would be to:

1) include all of the standards necessary for the approval of a limited use, including height limits for replacement poles; and
2) lower the maximum height of a tower from 199 to 179 feet.

Conditional use approval (with notice, a hearing, and a separate report) and at least a 300-foot setback from any residential property line would still be required. Only utility poles can withstand the stress of antennas. Where there are no utility poles, the replacement of a light pole with an antenna that has a street light on it would require conditional use approval.

One recommendation in submitted testimony asked the Council to ban cell towers in the right-of-way, but allow stealth towers on residential roofs. ZTA 18-02 takes a different approach. Cell towers are not banned, but where there are underground utilities (no utility poles), there are very few areas that could satisfy the 300-foot setback criteria that would be required for conditional use approval. (The zoning code does not allow antennas on existing residential structures; ZTA 18-02 ADDS townhouse to the list of structures where antennas are prohibited.[9])

Should the standards for an antenna on an existing structure be changed?

When Staff drafted ZTA 14-04 that allowed for small cell antennas on existing structures, Staff did not anticipate that the new structure would be a new pole. Staff anticipated antennas on buildings.[10] Only small cell antennas (a maximum of 3 feet or less in height under the current code; a maximum of 4 feet 2 inches under ZTA 18-02) have a setback requirement from any detached house or duplex. *Any larger antenna does not have a required setback under the current code.* ZTA 18-02 would correct the anomaly.

ZTA 18-02 has 3 new provisions:

1) in a residential zone, for facilities with a supporting cabinet greater than 4 feet high and not on a pole (utility, streetlight, or site plan approved parking lot light pole), the cabinet must be surrounded by landscaping;
2) Any equipment cabinet associated with a pole may not exceed 12 cubic feet in volume and must be the same color as the pole, unless a stealth design is approved by DOT;
3) A wireless facility in the right-of-way on an existing structure (which limits this to utility poles) must be the same color as the existing structure, a minimum 15 feet in height and,

[9] If this provision allowed for antennas on existing structures, it would increase the opportunity for antennas with the consent of the property owner without antennas in the right-of-way.
[10] There was testimony at the Planning Board concerning antennas on poles, but that testimony was not known to Staff.

> in a Rural Residential, Residential, or Planned Unit Development zone, 20 feet from a dwelling....in other zones 10 feet from a dwelling.[11]

In response to testimony, Executive staff recommended adding a provision to require any enclosure to be the same color or design as the existing structure (starting at line 303). Recommended revisions to antennas in the right-of-way (lines 316-323) would also require an enclosure for the antenna and the same color or pattern as the existing structure. *Staff agrees with these revisions.*

The "Antenna on Existing Structure" provisions in ZTA 18-02 would reduce the setback between a utility pole with a small wireless antenna and a single-unit dwelling. DOT has reported that no other pole can accommodate the weight and stress of the antenna. DPS considers a replaced pole as a NEW pole. The approval process for a new pole is described in the provision of a "Telecommunications Tower" above. If there are no utility poles in the area (whether utilities are underground), this provision would not apply.

Testimony noted that there are signs that may be able to support an antenna and these may be a better location than on parking lot light poles. Executive staff recommended adding "a sign" on line 217 to the list of existing structures where antennas may be located. **The Committee had no objection to allowing antennas on signs.**

As previously reported, testimony has pointed out that there are setback encroachments allowed in the zoning code.[12] If the Council believes that these areas would be adversely affected by the antenna, the setback could be measured from the nearest encroachment to the antenna.

Executive staff recommends amending line 324 to say that the setback should be either from a dwelling or the setback encroachment.

The Committee did not recommend a change to setbacks in residential zones and did not add a setback from encroachments.

Would cell towers and wireless antennas reduce property values?

Staff does not have an answer to this question. The two studies most often cited in support of the contention that property values would be lower due to a dwelling's proximity to a cell tower are suspect.

The National Institute for Science, Law and Public Policy surveyed 1,000 **self-selected** respondents (including those who completed the survey by June 28, 2014) and published the result in a paper titled, "Neighborhood Cell Towers & Antennas—Do They Impact a Property's Desirability?"[13] The study concluded that 94% of those who responded said that their interest in buying a property and the price the respondents would pay would be impacted by the presence of a nearby cell tower.

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[11] Antenna Site FCC RF Compliance Assessment and Report, prepared for Crown Castle Pole-mounted DAS Operations Project 377706 Maryland, Virginia, DC, June 28, 2017:

> For someone inside a building at a distance of as little as 10 feet away from the antennas and at the same height as the antennas, the conservatively calculated RF level is 15.00 percent of the FCC general population Maximum Permissible Exposure limit – well below the 100-percent reference for compliance. At distances greater than 10 feet from the antennas, or in positions lower or higher than the antennas, the RF levels are even less significant.

[12] Section 59.4.1.7.B: porches, decks, steps, stoops, balconies, and bay windows.

[13] The survey was circulated online through email and social networking sites, in both the U.S. and abroad. It sought to determine if nearby cell towers and antennas, or wireless antennas placed on top of or on the side of a building, would impact a homebuyer's or renter's interest in a real estate property.

The second cited study was published in The Appraisal Journal in the summer of 2005. Focusing on four case study neighborhoods in Christchurch, New Zealand, the article presented the results from both an opinion survey and market sales analysis undertaken in 2003 to determine residents' perceptions towards living near a cell tower and how this may have impacted property prices. Overall, respondents said they would pay (and price data found) from 10%–19% less to more than 20% less for a property if it were in close proximity to a cell tower. The study is limited in scope, out of country, and out of date.[14]

There is anecdotal evidence in both directions. An appraiser in New Jersey found that a 130-foot cell tower reduced property values.[15] An article in the National Real Estate Investor Quality concluded that quality cell phone coverage can have a significant impact on the desirability and value of a property.[16] A Real Estate appraiser concluded that visible utility structures adversely affect property values.[17] In a 2015 Delaware case, a court found that a cell tower did not impact surrounding property values.[18] Staff could not determine how much focus in the literature was on the short poles proposed in recent applications submitted to the County.

ZTA 18-02 is somewhat focused on rights-of-way. The Council has never considered the effect of housing prices on anything it allows in a right-of-way. Does the proximity to street lights, utility poles, signs, speed cameras, or traffic signals affect the value of abutting property? Staff cannot answer those questions. There has always been an assumption that facilities in the right-of-way service the general community (and abutting property specifically).

Should ZTA 18-02 include a minimum distance between antennas?

The Department of Technology Services is responsible for establishing and maintaining a process to coordinate the location of public and private telecommunications transmission facilities in the County.[19] As part of the coordination process set up, the Director's designee or contractor must:

(1) maintain a database of all transmission facilities located in the County, including any that the Director knows are proposed to be located in the County;
(2) serve as a central source of information and a technical resource on the siting of transmission facilities for land use agencies, land-owning agencies, private landowners, telecommunications carriers, and the public;
(3) in order to promote the appropriate and efficient location and co-location of transmission facilities and minimize any adverse impact on other land uses in the County and on transmission facilities used by government agencies:
    (A) review the siting of each proposed transmission facility;
    (B) advise any land use agency or land-owning agency on the technical rationale at that location for any telecommunications transmission facility and whether it qualifies under County land use laws as a public or private use; and

[14] The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods, Sandy Bond, PhD, and Ko-Kang Wang.
[15] https://patch.com/new-jersey/bridgewater/appraiser-t-mobile-cell-tower-will-affect-property-values.
[16] The Growing Impact of Wireless Accessibility on Property Values, Vince Varga, December 8, 2016.
[17] Testimony of David Burgoyne, March 7, 2017.
[18] AT&T v Sussex County Board of Adjustments, Delaware Superior Court, 2015; property value changes were measured after a temporary antenna was constructed.
[19] Montgomery Code, Chapter 2, Section 2-25E.

(C) recommend to any land use agency a decision on any pending siting issue, including any appropriate provisions governing removal of the facility after its useful life concludes and the posting of a bond to guarantee removal;

(4) assist public participation in the process of siting transmission facilities; and

(5) report annually to the County Executive and County Council on transmission facility siting and policy issues.[20]

One of the functions of the County's Telecommunications Transmission Facilities Coordinating Group (TFCG) is to foster the co-location of telecommunications facilities. It looks for existing facilities before recommending approval of new towers. In this regard, ZTA 18-02 follows that practice by allowing antennas on existing utility poles and does not require a minimum distance between antennas.[21]

The Committee did not recommend adding a minimum distance between antennas.

Who is responsible for as-built poles in the right-of-way and what action is being taken?

The Department of Permitting Services issues permits for work in the public right-of-way. The department responds to complaints. There is an ongoing program to remove utility poles when replacement utility poles are installed. All testimony on this subject was referred to DPS for action.

Should ZTA 18-02 insure that liability coverage of wireless service providers be adequate?

Testimony expressed concern about the liability coverage of wireless providers. In particular, Crown Castle's SEC filing was raised. The filing was reported to indicate the company's lack of insurance coverage, if radio frequency waves are determined to have adverse health effects.

[20] Section 2-58E(c).

[21] This is similar to the regulations in Rancho Palos Verdes, California.

The County's zoning regulatory powers are delineated in the Land Use Article.[22] Those provisions do not include regulating liability insurance. If there is a concern for liability, it would need to be addressed outside of zoning.[23]

The Committee did not recommend adding liability provisions in the zoning code.

Does the TFCG have sufficient funding and staff?

There have been no requests from the Executive to increase the capacity to review applications. There is a $2,000 charge for each new limited use application and a $2,500 charge for each new conditional use application. The Coordinator hires consulting experts to undertake reviews.

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[22] Section 22-104:
The local law may regulate:
(1) (i) the location, height, bulk, and size of each building or other structure, and any unit in the building or structure;
(ii) building lines;
(iii) minimum frontage;
(iv) the depth and area of each lot; and
(v) the percentage of a lot that may be occupied;
(2) the size of lots, yards, courts, and other open spaces;
(3) the construction of temporary stands and structures;
(4) the density and distribution of population;
(5) the location and uses of buildings and structures and any units in those buildings and structures for:
(i) trade;
(ii) industry;
(iii) residential purposes;
(iv) recreation;
(v) agriculture;
(vi) public activities; and
(vii)other purposes; and
(6) the uses of land, including surface, subsurface, and air rights for the land, for building or for any of the purposes described in item (5) of this subsection.

[23] The County Code already requires companies with a franchise for facilities in the public right-of-way to have the following insurance:
Sec. 8A-10. Insurance; bond; indemnification.
(a) A franchisee must have the following insurance coverage in force at all times during the franchise period:
(1) workmen's compensation insurance to meet all state requirements;
(2) general comprehensive liability insurance;
(3) automobile liability insurance covering all vehicles as specified in the franchise but not less than $250,000 per person, $500,000 per occurrence, and $100,000 for property damage; and
(4) any additional types of insurance and coverage amounts as the County may require.
All insurance policies must be with sureties qualified to do business in Maryland and in a form approved as to legality by the County Attorney. The County may accept a self- insurance plan that assures comparable protection in lieu of these insurance policies.
(b) To ensure the franchisee's performance of franchise obligations, a franchisee must have in force at all times during the franchise period a bond in a form approved by the County Attorney, consisting of cash, an irrevocable letter of credit, or a performance bond. A performance bond must be provided by a surety qualified to do business in Maryland. The bond must be to the benefit of the County or to other parties named in a franchise agreement. The bond must be of a type and in a sum specified in the franchise agreement as necessary to ensure the faithful performance and discharge of obligations imposed by law and the franchise agreement. Except for a limited franchise, the minimum bond amount must not be less than $250,000.
(c) A franchisee must, at its sole cost and expense, indemnify, hold harmless, and defend the County, its officials, boards, commissions, agents, and employees, against any claims, suits, causes of action, proceedings and judgments for damages or equitable relief arising out of the construction, maintenance, or operation of its cable system regardless of whether the

The Committee agreed to review the resources available to the TFCG this summer.

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act or omission complained of is authorized, allowed or prohibited by the franchise. This requirement includes claims arising out of copyright infringement or a failure by the franchisee to secure consent from the owner, authorized distributor, or licensee of a program to be delivered by the cable system.

(d) In an overbuild situation, the County may require franchisees to indemnify each other for any damage to facilities and services caused by construction or maintenance of their respective cable systems.

OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

February 2, 2018

TO: Hans Riemer, President
Montgomery County Council

FROM: Isiah Leggett
County Executive

SUBJECT: Telecommunications Towers - ZTA

I am attaching a Zoning Text Amendment (ZTA) for the Council's consideration that would amend zoning regulations related to placement of telecommunications towers. Because wireless technology is evolving, Montgomery County has recently received an unprecedented number of applications to deploy small cell antennas in the County. Council amended the zoning code in the mid-1990's to address 100 foot+ tall cell towers, and in 2014 to address limited small cell deployments. Further action is needed now to address small cells in dense urban areas and on utility poles.

On one hand, we all welcome the coming transformation that allows us to be one of the most digitally connected counties at home and at business. On the other hand, many of our residents are concerned about the placement of these antennas. Because of this concern, I sponsored four public forums over the past year to hear from the public about proposed changes to the zoning code to allow deployment of small cell antennas both in commercial and residential neighborhoods.

Because of the concerns that have been expressed by our residents, this ZTA will propose very limited changes in residential zones. It will allow deployment of small cell antennas as a limited use only in those zones where commercial and employment uses are allowed, the CRN, CRT, CR and NR zones. I will come back with proposal for changes in residential zones at a later date.

As noted in the community meetings, residents also expressed concerns about the health effects of radio frequency (RF) emissions from antennas, especially antennas that would be placed much closer to houses. As you are aware, the Federal Communications Commission (FCC) has exclusive jurisdiction to establish RF emissions standards, and local jurisdictions are preempted from regulating antennas deployments based on health effects. The FCC has not

updated its RF emission standards since 1996. We have learned that many of these standards are actually based on 1980s standards. We all agree that FCC's failure to issue new standards undermines public confidence that its rules will adequately address new wireless technology, and for that reason, Council President Riemer, Congressman Jamie Raskin and staff from all of our congressional delegation, and I met with FCC Chairman Ajit Pai in May 2017 to urge the FCC to update the RF standards.

Further, there is a very real threat of both federal and state preemption. We anticipate that in the very near term, an industry-sponsored bill that would preempt local zoning over small cell antennas may be introduced in the Maryland General Assembly. Therefore, it is important that Montgomery County move to enact zoning changes to demonstrate that we have provided a local solution. The ZTA I am proposing works to allow more deployments in commercial/residential zones, allows deployment of antennas that can support four carriers, and allows deployment of antennas on lower height buildings. It does not change, and leaves for further discussion, changes to deployments in residential areas.

I look forward to working with the Council to ensure a successful solution to the deployment of small cell technology.

IL/mh

Zoning Text Amendment No.: 18-02
Concerning: Telecommunications Towers – Limited Use
Draft No. & Date: 3 – 5/7/18
Introduced: February 13, 2018
Public Hearing: April 3, 2018
Adopted:
Effective:
Ordinance No.:

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN MONTGOMERY COUNTY, MARYLAND

Lead Sponsor: Council President at the request of the Executive

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AN AMENDMENT to the Montgomery County Zoning Ordinance to:

- revise the use standards for antennas;
- revise the standards for antennas on existing structures;
- allow telecommunications towers as a limited use in certain zones; and
- generally amend telecommunications tower and cellular antenna provisions.

By amending the following sections of the Montgomery County Zoning Ordinance, Chapter 59 of the Montgomery County Code:

DIVISION 3.1.	"Use Table"
Section 3.1.6.	"Use Table"
DIVISION 3.5.	"Commercial Uses"
Section 3.5.2.	"Communication Facility"
Section 3.5.14.	"Accessory Commercial Uses"

EXPLANATION: ***Boldface*** *indicates a Heading or a defined term.*
Underlining indicates text that is added to existing law by the original text amendment or by ZTA 14-09.
[Single boldface brackets] indicate text that is deleted from existing law by original text amendment.
Double underlining indicates text that is added to the text amendment by amendment or text added by this amendment in addition to ZTA 14-09.
[[Double boldface brackets]] indicate text that is deleted from the text amendment by amendment or indicates a change from ZTA 14-09.
** * * indicates existing law unaffected by the text amendment.*

OPINION

Zoning Text Amendment No. 18-02 was introduced on February 13, 2018. ZTA 18-02 would amend zoning regulations related to the placement of telecommunications antennas in non-residential zones and the provision for antennas on existing structures in all zones.

In its report to the Council, the Montgomery County Planning Board agreed with the recommendation of Planning staff that ZTA 18-02 should be approved as introduced. In the opinion of Planning staff, ZTA 18-02 strikes a balance in addressing the community's interest in having increased access to mobile broadband services and the evolving technical needs of the wireless industry while also working to protect the community's interest in managing commercial use of public property and maintaining attractive and safe roads and neighborhoods. Planning staff recommended approval of ZTA 18-02 as introduced.

The text amendment was referred to the Planning, Housing, and Economic Development Committee for review and recommendation.

The Council conducted a public hearing on April 3, 2018. The testimony was split between support and opposition, with a majority of those speaking opposed to the approval of ZTA 18-02. Generally, industry representatives and non-residential interests (Chambers of Commerce, T-Mobile, and Crown Castle) favored the approval of ZTA 18-02. Other speakers (the Town of Somerset, the Civic Federation, and individuals) opposed the ZTA. Proponents cited increasing needs for wireless bandwidth for businesses, customers, and E-911 communications. Business interests cited the competitive advantage achieved by jurisdictions with superior wireless service.

Outside of numerous statements about the health effects of radio frequency antennas, most opposition objected to reducing the setback required between existing structures and houses from 60 feet to 20 feet. Some testimony called for 1,500-foot setbacks from schools. There was some opposition to adding Telecommunications Tower as a limited use in the CRN, CRT, CR, and LSC zones because the new limited use (and where an existing limited use is allowed) would not afford the public adequate notice and an opportunity to contest the tower. An issue concerning reduced property values was raised by testimony. Some opponents questioned whether wireless companies had sufficient liability coverage given their potential risks. Some who testified cited the County's lack of capacity or commitment to regulating antennas (and towers) once they are approved for construction as a reason to oppose ZTA 18-02. One opponent wanted to see the regulatory requirements of other jurisdictions before recommending any action.

The Council referred the text amendment to the Planning, Housing, and Economic Development Committee for review and recommendation.

The Planning, Housing, and Economic Development Committee held a worksession on May 3, 2018. The Committee recommended approval of ZTA 18-02 (3-0) with amendments. The Committee recommended retaining all of the current setback and building height standards for antennas on existing facilities in residential zones and adding provisions that will require compatible antenna enclosures where antennas are allowed. The ZTA would allow more permissive standards for antennas in mixed-use and non-residential zones.

A majority of the Committee recommended lowering the maximum allowable tower heights for new towers that require conditional use approval (2-1, Councilmember Leventhal would have deferred this item; he favored a separate ZTA concerning residential zones).

The Council agreed with the recommendations of the Committee.

For these reasons, and because to approve this amendment will assist in the coordinated, comprehensive, adjusted, and systematic development of the Maryland-Washington Regional District located in Montgomery County, Zoning Text Amendment No. 18-02 will be approved as amended.

ORDINANCE

The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following ordinance:

Sec. 1. DIVISION 59-3.1 is amended as follows:

DIVISION 59-3.1. Use Table

* * *

Section 3.1.6. Use Table

The following Use Table identifies uses allowed in each zone. Uses may be modified in Overlay zones under Division 4.9.

USE OR USE GROUP	Definitions and Standards		Rural Residential			Residential													Commercial/ Residential			Employment				Industrial		
						Residential Detached							Residential Townhouse			Residential Multi-Unit												
			R	RC	RNC	RE-2	RE-2C	RE-1	R-200	R-90	R-60	R-40	TLD	TMD	THD	R-30	R-20	R-10	CRN	CRT	CR	GR	NR	LSC	EOF	IL	IM	IH
* * *																												
COMMERCIAL																												
* * *																												
Communication Facility	3.5.2																											
Cable Communications System	3.5.2.A	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	P	C	C	C	C
Media Broadcast Tower	3.5.2.B	C	C	C		C	C	C	C	C	C	C				C	C	C				C		L	C	C	C	P
Telecommunications Tower	3.5.2.C	L/C	L/C	L/C	C	C	C	C	C	C	C	C							L	L	L	L/C	L/C	L	L/C	L	L	L

Key: P = Permitted Use L = Limited Use C = Conditional Use Blank Cell = Use Not Allowed

Sec. 2. DIVISION 59-3.5 is amended as follows:

DIVISION 3.5. Commercial Uses

* * *

Section 3.5.2. Communication Facility

* * *

C. Telecommunications Tower

1. Defined

a. Telecommunications Tower means any structure, other than a building, [providing] used to provide wireless voice, data, or image transmission within a designated service area. Telecommunications Tower [consists of] includes one or more antennas attached to a support structure, and related equipment, but does not include amateur radio antenna (see Section 3.5.14.A and Section 3.5.14.B, Amateur Radio Facility), radio or TV tower (see Section 3.5.2.B, Media Broadcast Tower), or an antenna on an existing structure (See Section 3.5.14.C, Antenna on Existing Structure).

b. Antenna Dimension means an antenna, and any enclosure containing the antenna, in which the total combined size of the antenna within any enclosure meets the following dimensions:

Standard	Maximum Length on Any Side (in feet)	Maximum Volume (in cubic feet, excluding any equipment cabinet)
A	4 feet 2 inches	6 cubic feet
B	4 feet 2 inches	46 cubic feet
C	6 feet	30 cubic feet
D	9 feet	13 cubic feet
E	15 feet	1 cubic foot

2. Use Standards

a. Where a Telecommunications Tower is allowed as a limited use in the Agricultural zone, Rural zone, Rural Cluster zone, Employment zones, and Industrial zones, and the [[Tower]] tower is not a replacement tower that complies with 59.3.5.2.C.2.b, it must satisfy the following standards:

[i. It must not be staffed.]

[ii]i. Antennas are limited to the following [types and dimensions]:

(a) an antenna that satisfies one of the Antenna Dimensions standards in Section 59.3.5.2.C.1.b [omni-directional (whip) antennas with a maximum height of 15 feet and a maximum diameter of 3 inches];

(b) [directional or panel antennas with a maximum height of 8 feet and a maximum width of 2 feet; and

(c)] satellite or microwave dish antennas with a maximum diameter of 8 feet.

[iii]ii. Signs or illumination on the antennas or support structure are prohibited unless required by the Federal Communications Commission, the Federal Aviation Administration, or the County.

[iv]iii. In the AR, R, and RC zones, the tower must be located within an overhead transmission line right-of-way and is a maximum height of [199]179 feet. The tower must be a

minimum of 300 feet from any [residence] dwelling. A Telecommunications Tower conditional use application may be filed with the Hearing Examiner to deviate from this standard.

[v]iv. In the LSC, IL, IM, and IH zones, the tower is a maximum height of [199]179 feet with a setback of one foot for every foot of height from the property lines of all properties zoned Agricultural, Rural Residential, or Residential.

[vi]v. In the GR and EOF zones, the tower is a maximum height of [150]130 feet with a setback of one foot for every foot of height from the property lines of all properties zoned Agricultural, Rural Residential, or Residential. A Telecommunications Tower conditional use application may be filed with the Hearing Examiner to deviate from this standard.

b. In the Commercial/Residential, Industrial, and Employment zones, where a Telecommunications Tower is allowed as a limited use and the tower would replace a pre-existing utility pole, streetlight pole, or site plan approved parking lot light pole, the [[Tower]] tower is allowed if it satisfies the following standards:

i. Antennas must comply with the Antenna Classification Standard A under Section 59.3.5.2.C.1.b, be concealed within an enclosure the same color as the pole, be installed at a minimum height of 15 feet, and [[must]] be installed parallel with the [[Tower]] tower.

ii. The tower must be located:

(a) within 2 feet of the base of a pre-existing pole and at the same distance from the curb line, or edge of travel lane in an open section, as the pre-existing pole in a public right-of-way;

(b) at least 10 feet from an existing building;

(c) outside of the roadway clear zone as determined by the Department of [[Transportation]] Permitting Services;

(d) in a manner that allows for adequate sight distances as determined by the Department of [[Transportation]] Permitting Services; and

(e) in a manner that complies with streetlight maintenance requirements as determined by the Department of Transportation.

iii. A pre-existing streetlight or parking lot light pole must be removed within 10 business days after power is activated to the replacement tower, and a pre-existing utility pole must be removed within 180 days after a replacement utility pole is installed.

iv. The height of the tower, including any attached antennas and equipment, must not exceed:

(a) for streetlights, the height of the pole that is being replaced:

(1) plus 6 feet when abutting a right-of-way with a paved section width of 65 feet or less; or

(2) plus 15 feet when abutting a right-of-way with a paved section width greater than 65 feet.

(b) for utility poles and parking lot lights, the height of the pre-existing utility or parking lot light pole plus 10 feet.

v. The tower must be the same color as the pre-existing pole.

vi. The tower must have no exterior wiring, except that exterior wiring may be enclosed in shielded conduit on wooden or utility poles.

vii. Any equipment cabinet:

(a) must not exceed a maximum volume of 12 cubic feet;

(b) used to support antennas on a replacement streetlight pole must be installed in the Telecommunications Tower base or at ground level, unless this requirement is waived by the Department of Transportation;

(c) must be the same color or pattern as the pre-existing **[[**Tower**]]** tower, except as provided in Section 59.3.5.2.C.2.b.vii(d);

(d) may be a stealth design approved by the Department of Transportation.

viii. The tower must include a replacement streetlight, if a streetlight existed on the pre-existing pole.

ix. The design of a replacement tower located in a public right-of-way, including the footer and the replacement streetlight, must be approved by the Department of Transportation.

x. The noise level of any fans must comply with Chapter 31B.

xi. Signs or illumination on the antennas or support structure, except a streetlight, are prohibited unless required by the Federal Communications Commission or the County.

xii. [[Each]] The owner of the tower or the [[antennas]] antenna attached to the tower must maintain their tower, antennas, and equipment in a safe condition, remove graffiti, and repair damage.

xiii. If a tower does not have a streetlight, the tower must be removed at the cost of the owner of the tower when the tower is no longer in use for more than 12 months. [[Antennas]] Any antenna and equipment must be removed at the cost of the owner of the antenna and equipment when the antennas and equipment are no longer in use for more than 12 months. The Telecommunications Transmission Facilities Coordinating Group must be notified within 30 days of the removal.

[b]c. Where a Telecommunications Tower is allowed as a conditional use, it may be permitted by the Hearing Examiner under [all

applicable] Section 3.5.2.C.2.a, limited use standards, Section 7.3.1, Conditional Use, and the following standards:

* * *

ii. A Telecommunications Tower must be set back [from the property line], as measured from the base of the support structure, as follows:

(a) A Telecommunications Tower is prohibited in any scenic setback indicated in a master plan.

(b) In the Agricultural, Rural Residential, and Residential Detached zones, a distance of one foot for every foot of height or 300 feet from an existing dwelling, whichever provides the greater setback [[from any property line]].

(c) In the Employment zones, a distance of one-half foot for every foot of height [when] from the property lines of abutting [Commercial/Residential] Commercial/Residential, Employment, or Industrial zoned properties, and one foot for every foot of height [when] from the property lines of abutting Agricultural, Rural Residential, or Residential zoned properties.

(d) The Hearing Examiner may reduce the setback requirement to not less than the building setback for a detached house building type in the applicable zone or to a distance of one foot from an off-site dwelling for every foot of height of the support structure, whichever is greater, if evidence

indicates that a reduced setback will allow the support structure to be located on the property in a less visually obtrusive location than locations on-site where all setback requirements can be met after considering the height of the structure, topography, existing vegetation, nearby residential properties, and visibility from the street. A reduced setback may be approved only if there is a location on the property where the setback requirements can be met.

iii. The maximum height of a support structure and antenna is [155]135 feet, unless it can be demonstrated that additional height up to [199]179 feet is needed for service, collocation, or public safety communication purposes. At the completion of construction, before the support structure may be used to transmit any signal, and before the final inspection required by the building permit, the applicant must certify to DPS that the height and location of the support structure conforms with the height and location of the support structure on the building permit.

* * *

Section 3.5.14. Accessory Commercial Uses

* * *

C. Antenna on Existing Structure

1. Defined

Antenna on Existing Structure means one or more antennas attached to an existing support structure, including [such as] a building, a transmission tower, a monopole, a light pole, a utility pole, a water tank, a silo, a barn, a sign, or an overhead transmission line support structure. Antenna on Existing Structure includes related equipment.

2. Use Standards

Where an Antenna on Existing Structure is allowed as a limited use, it must satisfy the following standards:

a. Antennas are limited to the following types and dimensions:

i. an antenna that satisfies one of the Antenna Dimensions standards in Section 59.3.5.2.C.1.b; and [omni-directional (whip) antennas with a maximum height of 15 feet and a maximum diameter of 3 inches;

ii. directional or panel antennas with a maximum height of 8 feet and a maximum width of 2 feet;

iii]ii. satellite, radar, or microwave dish antennas with a maximum diameter of 8 feet. If the building includes a media broadcast studio, a dish may have a maximum diameter of 22 feet[; and

iv. small cell antennas with a maximum height of 3 feet and a maximum width of 2 feet].

* * *

c. Associated equipment must be located in an unmanned building, equipment cabinet, or equipment room in an existing building.

i. An equipment building must satisfy the following standards:

[i.](a) It is a maximum of 560 square feet in area; however, a single equipment building in excess of 560 square feet, located at ground level, may be used if:

([a]1) the overall maximum square footage is 1,500 square feet and the maximum height is 12 feet;

([b]2) the building is used for more than one telecommunications provider operating from the same monopole or tower; and

([c]3) the building is reviewed by the Telecommunications Transmission Facility Coordinating Group under Chapter 2 (Section 2-58E).

[ii.](b) It is a maximum of 14 feet in height, including the support structure for the equipment building.

[iii.](c) If the equipment building is greater than 4 feet in height and is [or cabinet is at ground level] in a Residential zone, or the nearest abutting property is in a Residential zone, [and the equipment building or cabinet is more than 4 feet in height, including the support structure,] the building [or cabinet] must be faced with brick or other material compatible with the surrounding neighborhood on all sides [and the equipment must

be surrounded by landscaping of at least 3 feet in height].

ii. If an equipment cabinet and any supporting platform are greater than 4 feet in height, and service an Antenna on [[an]] Existing Structure that is not a utility pole, streetlight pole, or site plan approved parking lot light pole, and if the Existing Structure is in a Residential zone, or the nearest abutting property to the Existing Structure is in a Residential zone, then the equipment must be surrounded by landscaping of at least 3 feet in height.

iii. If an equipment cabinet services an Antenna on Existing Structure and the Existing Structure is a utility pole, streetlight pole, or site plan approved parking lot light pole, the equipment cabinet:

(a) must not exceed a maximum volume of 12 cubic feet; and

(b) must be the same color or pattern as the existing structure, unless it is a stealth design approved by the Department of Transportation.

* * *

d. Except under Section 3.5.14.C.2.e [for a small cell antenna that satisfies Section 3.5.14.C.2.a.iv], when mounted on a rooftop or structure located outside of a right-of-way [on privately owned land], the antenna must meet the following standards:

i. An antenna is prohibited:

(a) on any detached house, [or] duplex, or townhouse building type or an accessory structure associated with either building type; and

(b) in any scenic setback indicated in a master plan.

ii. An antenna and a related unmanned equipment building or cabinet may be installed on a rooftop, if a building is a minimum height of:

(a) [50] [[35]] 50 feet in any Residential Detached, Rural Residential, or Planned Unit Development zone, and must be mounted in an antenna enclosure the same color or design as the building; or

(b) [30] 20 feet in any Residential Multi-Unit, Commercial/Residential, Employment, or Industrial zone, and must be mounted in an antenna enclosure the same color or design as the building.

* * *

e. [When located at least 60 feet from a detached house or a duplex building type, a small cell antenna that satisfies Section 3.5.14.C.2.a.iv may be installed on any existing structure, at a minimum height of 15 feet, in any zone where an antenna on an existing structure is allowed.]

An antenna classified as Standard A under Section 3.5.2.C.1.b may be installed on any existing structure located in the right-of-way in any zone where an antenna on an existing structure is allowed, if:

i. the antenna is in an enclosure and the enclosure is the same color or pattern as the existing structure;

ii. the antenna and the antenna enclosure is installed at a minimum height of 15 feet; and

iii. the structure is at least [[20]] 60 feet from a dwelling in a Rural Residential, Residential, or Planned Unit Development zone, and at least 10 feet from any structure in any Commercial/Residential, Employment, or Industrial zone.

* * *

Sec. 4. Effective date. This ordinance becomes effective 20 days after the date of Council adoption.

This is a correct copy of Council action.

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Megan Davey Limarzi, Esq.
Clerk of the Council

MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIR

March 13, 2018

TO: The County Council for Montgomery County, Maryland, sitting as the District Council for the Maryland-Washington Regional District in Montgomery County, Maryland

FROM: Montgomery County Planning Board

SUBJECT: Zoning Text Amendment No. 18-02

BOARD RECOMMENDATION

The Montgomery County Planning Board of The Maryland–National Capital Park and Planning Commission reviewed Zoning Text Amendment No. 18-02 at its regular meeting on March 8, 2018. By a vote of 5:0, the Planning Board recommends approval of the amendment to revise the use standards for antennas, revise the standards for antennas on existing structures, and allow telecommunications towers as a limited use in certain zones.

Zoning Text Amendment No. 18-02 (ZTA 18-02) would amend zoning regulations related to the placement of telecommunications antennas in non-residential zones and the provision for antennas on existing structures in all but the townhouse zones. The ZTA has less impact to Residential zones in comparison to ZTA 16-05, which was the subject of a previous Council public hearing (ZTA 16-05 would allow poles, within the Zoning Ordinance's definition of Telecommunications Towers, no higher than 30 feet in most zones as a limited use).

As proposed, ZTA 18-02:

- Modifies antenna size limits to allow slightly taller or wider antennas, including cubic foot volume limits and more antenna size categories, to allow only small antennas on poles and lower height buildings;
- Retains the current conditional use requirements for allowing new towers in residentially zoned areas;
- Allows towers as a limited use in the CRN, CRT, CR and NR zones on streetlights, utility poles, and parking lot lights;
- Lowers maximum tower height by 20 feet to allow for FCC by-right allowances to increase structure heights by 20 feet;
- Establishes new regulations concerning utility poles (poles that support electric wires), streetlight poles and parking lot lights;
- Reduces the setbacks for smaller antennas on existing structures located in the right-of-way from 60 feet to 20 feet, consistent with setbacks for larger antennas; and
- Reduces the minimum height of other existing structures located outside of a right-of-way that may have antennas placed on them from 50 feet to 35 feet in a Residential Detached, Rural Residential or Planned Unit Development zone, and from 30 feet to 20 feet in any Residential Multi-Unit, Commercial/Residential, Employment, or Industrial zone.

8787 Georgia Avenue, Silver Spring, Maryland 20910 Chairman's Office: 301.495.4605 Fax: 301.495.1320
www.montgomeryplanningboard.org E-Mail: mcp-chair@mncppc.org

The Planning Board believes that ZTA 18-02 strikes a balance in addressing the community's interest in having increased access to mobile broadband services and the evolving technical needs of the wireless industry while also working to protect the community's interest in managing commercial use of public property and maintaining attractive and safe roads and neighborhoods.

CERTIFICATION

This is to certify that the attached report is a true and correct copy of the technical staff report and the foregoing is the recommendation adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, at its regular meeting held in Silver Spring, Maryland, on Thursday, March 8, 2018.

Casey Anderson
Chair

CA:GR

MCPB
Item No. 7
Date: 3-8-18

Zoning Text Amendment (ZTA) No. 18-02, Telecommunications Towers – Limited Use

Gregory Russ, Planner Coordinator, FP&P, gregory.russ@montgomeryplanning.org, 301-495-2174

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Completed: 03/1/18

Description

ZTA No. 18-02 amends the Montgomery County Zoning Ordinance to revise the use standards for antennas, revise the standards for antennas on existing structures and allow telecommunications towers as a limited use in certain zones.

Summary

Staff recommends approval of ZTA No. 18-02 to revise the use standards for antennas, revise the standards for antennas on existing structures and allow telecommunications towers as a limited use in certain zones.

Background/Analysis

As people use their cell phones for far more than voice communication, there is a greater demand for wireless services throughout Montgomery County. ZTA 18-02 would amend zoning regulations related to the placement of telecommunications antennas in non-residential zones and the provision for antennas on existing structures. The ZTA proposed by the Executive has less impacts to Residential zones in comparison to ZTA 16-05, which was the subject of a previous Council public hearing (Zoning Text Amendment (ZTA) 16-05 would allow poles (within the Zoning Ordinance's definition of Telecommunications Towers) no higher than 30 feet in most zones as a limited use.). At this time, no further Council action is scheduled on ZTA 16-05.

As proposed, ZTA 18-02 adds to or modifies the telecommunication provisions as discussed below:

- **Antenna size limits are modified to allow slightly taller or wider antennas, including cubic foot volume limits and more antenna size categories**, to allow only small antennas on poles and lower height buildings. Current law references antenna size, but most antennas are enclosed – either to protect them from the elements or for aesthetics – in a panel, canister, or box shaped enclosure. ZTA 18-02 proposes size limitations to the combined volume of the antenna and its enclosure. Current law limits antennas to sizes that prohibit providers from using more powerful or efficient antennas. The

technical trade-off is more, smaller antennas, are needed if taller, more powerful, antennas cannot be used. The ZTA provides fixed height limits but provides height limits that are slightly taller than now permitted and adds volume limits to give some flexibility to dimensional width and depth. By making these changes, the term "small cell" antenna is no longer necessary and is therefore eliminated. (*Lines 25-27*)

- Retains the current Conditional use requirements for allowing new towers in residentially zoned areas (There are no proposed changes to setbacks, notice, hearings, and findings for approval).

- Allows towers as a limited use in the CRN, CRT, CR and NR zones (new provision). Streetlights, utility poles, and parking lot lights in these zones and all other Employment and Industrial zones, would be allowed to be replaced under the limited use provisions as discussed below under the bullet discussing "new regulations concerning utility poles, streetlights, and parking lot lights". Currently, there are no limited use provisions in the CRN, CRT CR or NR zones to allow antennas below current rooftop heights. More antennas are needed in commercial areas, such as downtown Silver Spring and Bethesda, where concentrated use of mobile devices is straining network capacity. More antennas deployed below current rooftop heights are needed to supplement coverage. (*Line 6-Use Table*)

- Lowers maximum tower height from 199 feet to 179 feet (In the AR, R, RC, LSC, IL, IM, and IH zones), from 150 to 130 feet (In the GR and EOF zones) and in the case of a conditional use application, from 155 to 135 feet, unless it can be demonstrated that additional height up to 179 feet (currently 199 feet) is needed for service, collocation, or public safety communication purposes. (*Lines 52-70, and Lines 192-196*)

- Establishes new regulations concerning utility poles (poles that support electric wires), streetlight poles and parking lot lights. In order to support antennas and equipment, typically the pre-existing pole must be removed and a stronger and taller replacement pole is needed. Under ZTA 18-02, streetlights, utility poles, and parking lot lights in Commercial/Residential, Industrial, and Employment zones, can be replaced as a limited use under certain conditions as highlighted below. (Lines 71-
    - Antennas must comply with the Antenna Classification Standard A under Section 59.3.5.2.C.1.b and must be installed parallel with the Tower. Standard A defines the smallest antenna size (4 feet, 2 inches in maximum length or width, 6 cubic feet in maximum volume) under the newly proposed antenna standards.
    - Height increases for antennas on *replacement utility poles and parking lot lights* are limited to 10 feet higher than the pre-existing pole.
    - Height increases for antennas on *replacement streetlights* are limited to the height of the pole being replaced plus 6 feet, when abutting a right-of-way with a paved section width of 65 feet or less; or plus 15 feet when abutting a right-of-way with a paved section width greater than 65 feet (more height is needed to serve both sides of congested roadways).
    - Replacement streetlights, utility poles, and parking lot light poles must be located within 2 feet of the pre-existing pole and at the same distance from the curb line, or edge of travel lane in an open section, as the pre-existing pole in a public right-of-way; must be

located at least 10 feet from an existing building, the wiring must be located inside the pole (or in a conduit on wooden pole), the equipment must be painted the same color or design as the pre-existing pole or may be a stealth design. Pre-existing streetlight and parking lot light poles are to be removed within 10 business days of installation of the new pole and a pre-existing utility pole is to be removed within 180 days after a replacement utility pole is installed.

- Any equipment cabinet must not exceed a maximum volume of 12 cubic feet, must be installed in the Telecommunications Tower base or at ground level, unless this requirement is waived, and must be the same color or pattern as the pre-existing Tower unless approved as a stealth design.

- The current code allows large antennas on existing structures near detached dwellings, but requires a 60-foot setback from detached dwellings for smaller antennas. The proposed ZTA would reduce the setbacks for smaller antennas on existing structures located in the right-of-way from 60 feet to 20 feet. Antennas are currently and would continue to be prohibited on detached dwellings and duplexes. The ZTA proposes to also prohibit attaching antennas on townhouses. These provisions further refine the original intent of the 2014 legislation establishing the small cell antenna standards.

- The minimum height of other existing structures located outside of a right-of-way that may have antennas would be reduced from 50 feet to 35 feet in a Residential detached, Rural Residential or Planned Unit Development zone and from 30 feet to 20 feet in any Residential Multi-Unit, Commercial/Residential, Employment, or Industrial zone. Many commercial one-story and one-and-one-half-story buildings, such as large supermarkets and neighborhood banks, could be good locations to place antennas if the minimum height is lowered. Some anomalous tall buildings in residential neighborhoods (schools, institutional uses, etc.) can be used if the minimum building height for placement of antennas in residential neighborhoods is lowered thereby providing suitable alternatives to installing more equipment on poles. The intent of limiting the size (and requiring antennas to be painted or screened to match building color or design) is to make antennas on lower height buildings less noticeable.

Limited Use Requirements for Telecommunications Towers–Montgomery County

As defined under Section 59.3.5.2(C)(1), Telecommunications Tower means any structure other than a building, providing wireless voice, data or image transmission within a designated service area. A Telecommunications Tower consists of one or more antennas attached to a support structure and related equipment, but does not include amateur radio antenna (see Section 3.5.14.A and Section 3.5.14.B, Amateur Radio Facility), radio or TV tower (see Section 3.5.2.B, Media Broadcast Tower), or an antenna on an existing structure (See Section 3.5.14.C, Antenna on Existing Structure).

A Telecommunications Tower is allowed as a limited use in the AR, R, RC, GR, LSC, EOF and all Industrial zones, and must satisfy a number of standards including: locational requirements in the AR, R and RC zones (must be located within an overhead transmission line right-of-way); height limitations (a

maximum height of 199 feet in the AR, R, RC, LSC, IL, IM, and IH zones and a maximum height of 150 feet in the GR and EOF zones); and setback requirements (In the AR, R, and RC zones, the tower must be a minimum of 300 feet from any residence. In the GR, EOF, LSC, IL, IM, and IH zones, the tower must have a setback of one foot for every foot of height from all properties zoned Agricultural, Rural Residential, or Residential). In the AR, R, RC, GR, and EOF zones, a Telecommunications Tower conditional use application may be filed with the Hearing Examiner to deviate from these standards. Under ZTA 18-02, in the Agricultural zone, Rural zone, Rural Cluster zone, Employment zones, and Industrial zones, and where a tower is not a replacement tower (Section 59.3.5.2.C.2.b) the existing limited use standards continue to apply, except that the maximum tower heights are reduced from 199 feet to 179 feet (In the AR, R, RC, LSC, IL, IM, and IH zones), and from 150 to 130 feet (In the GR and EOF zones).

Conclusion

Staff believes that ZTA 18-02 strikes a balance in addressing the community's interest in having increased access to mobile broadband services and the evolving technical needs of the wireless industry while also working to protect the community's interest in managing commercial use of public property and maintaining attractive and safe roads and neighborhoods. Staff recommends approval of ZTA 18-02 as introduced.

Attachments

1. ZTA No. 18-02 as introduced

Attached are recommended amendments to ZTA 18-02 to address questions and concerns raised by the community:

1. To address antennas on replacement poles being required to be in enclosures and at minimum heights, and as technical correction to have the minimum height for antennas on replacement poles be consistent with the minimum height for antennas attached to existing structures (see lines 310-311), at lines 77-79, change to

   Antennas must comply with the Antenna Classification Category A under Section 59.3.5.2.C.1.b, be concealed within a enclosure the same color as the pole to minimize visual impact, be installed at a minimum height of 15 feet, and [[must]] be installed perpendicular to the ground;

2. As technical corrections, because DPS not DOT has general enforcement responsibilities for new structures in the right of way:

   At lines 88-95, correct the numbering from (c), (d), (e) to (d), (e), (f)

   At lines 89 and 93-94, change Department of Transportation to Department of Permitting Services.

3. To streamline enforcement of height restrictions on poles replacing direct buried low height streetlights (which are generally 14 feet tall but the actual height may vary with ground settlement conditions), at lines 105-106, change to:

   iv. The height of the tower, including any attached antennas and equipment, must not exceed:

   (a) for streetlights, [[the height of the pole that is being replaced]]

   (1) [[plus 6 feet]]a maximum height of 20 feet or 6 feet more than the height of the streetlight pole being replaced, whichever is greater, when abutting a right-of-way with a paved section width of 65 feet or less;

   (2) [[plus 15 feet]]15 feet more than the height of the streetlight pole being replaced when abutting a right-of-way with a paved section width greater than 65 feet;

4. As a technical correction, the tower owner, not antenna owner is responsible for removing graffiti and repairing damage. The tower power will require antenna owners to make repairs as necessary. At line 143, delete "antennas attached to" to read:

   xii. Each owner of [[antennas attached to]] the tower must maintain antennas, equipment and abutting tower areas in a safe condition, remove graffiti, and repair damage.

5. Antennas may be installed on signs as attachments to existing structures. To confirm the existing practice, at line 212, change to:

f. Antennas on Existing Structure means one or more antennas attached to an existing support structure, including [such as] a building, a transmission tower, a monopole, a light pole, a utility pole, a water tank, a silo, a barn, a sign, or an overhead transmission line support structure. Antenna on Existing Structure includes related equipment.

6. To address concerns about concealment of antennas on buildings and as a technical correction to have the same building height requirements for attachments to building roofs and facades, at line 298 insert:

iii. An antenna may be mounted on the facade of a building at a minimum height of:

(a) [50] 35 feet in any Residential Detached, Rural Residential, or Planned Unit Development zone, if mounted in an antenna enclosure the same color or design of the building; or

(b) [30] 20 feet in any Residential Multi-Unit, Commercial/Residential, Employment, or Industrial zone, if mounted in an antenna enclosure the same color or design of the building.

7. To ensure that when the smallest class of antennas are installed on structures in the right of way are enclosed, at lines 308 to 310, change to:

i. the antenna is in an antenna enclosure and the enclosure is the same color or pattern as of the existing structure;

ii. the antenna and antenna enclosure is installed at a minimum height of 15 feet;

8. To address concerns about how porches may impact measurements of setback distances, at lines 312-316, change to:

iii. the existing structure in the right of way is at least 20 feet from a dwelling or the setback encroachment in a Rural Residential, Residential and Planned Unit Development zone and at least 10 feet from any structure in any Commercial/Residential, Employment, or Industrial zone.

9. Regarding the Spectrum Act, the Executive Branch does not believe that that the ZTA should be altered beyond the lower height limits added for new towers at lines 54, 61, and 66. Where the ZTA is authorizing additional height for replacement poles, the Executive Branch believes that there is a limited risk of litigation, and would not make further amendments to lines 101 to 109. If however, Council would prefer to amend the ZTA to factor in the potential 10 foot height increase to existing structures in the ROW as permitted by the FCC's interpretation of the Spectrum Act, the Executive Branch provides following amendment as replacement for Section 59.3.5.2.C.2.b.iv at lines 101-112 (it includes recommended Item 7 above). Note that

under this approach, if the FCC changes its interpretation of the Spectrum Act, any additional height increases authorized by the FCC would be incorporated into the zoning code.

iv. The height of the tower, including any attached antennas and equipment, must not exceed:

(a) for streetlights,

(1) a maximum height of 10 feet plus additional height permitted by federal law, or the height of the streetlight pole that is being replaced less 4 feet plus additional height permitted by federal law, whichever is greater, when abutting a right-of-way with a paved section width of 65 feet or less;

(2) 5 feet more than the height of the streetlight pole being replaced plus additional height permitted by federal law, when abutting a right-of-way with a paved section width greater than 65 feet;

(b) for utility poles and parking lot lights, the height of the pole that is being replaced plus additional height permitted by federal law.