

STAFF RECOMMENDATION

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NCPC File No. ZC 01-02



TEXT AMENDMENT TO THE ZONING REGULATIONS OF THE DISTRICT OF COLUMBIA TO ADD CHAPTER 26 – REGULATION OF ANTENNAS, ANTENNA TOWERS AND MONOPOLES

Submission by the Zoning Commission of the District of Columbia

September 25, 2003

Abstract

The District of Columbia Zoning Commission has taken a proposed action to amend the District of Columbia Zoning Regulations by adding Chapter 26 – Regulations of Antennas, Antenna Towers and Monopoles to the text of the regulations. This Chapter will provide zoning standards for the installation of all telecommunication antennas, support structures, and related equipment on private and District of Columbia owned property. These standards will regulate number, placement, height, and visual impact of these telecommunication facilities while also establishing safety and security standards for their installation.

Federal Interests

The federal interests include maintaining the aesthetic quality of federal properties and structures in the National Capital that may be impacted by the installation of telecommunication facilities on private and District of Columbia owned property and ensuring that such facilities are consistent with the Height of Buildings Act.

Commission Action Requested by Applicant

Approval of comments to the District of Columbia Zoning Commission pursuant to Section 8 of the National Capital Planning Act (40 U.S.C. § 8724(a)) and D.C. Code § 2-1006(a).

Executive Director's Recommendation

The Commission:

- Concludes that the text amendment to amend the District of Columbia Zoning Regulations by adding Chapter 26 – Regulations of Antennas, Antenna Towers and Monopoles **would not negatively affect** the federal interest.
- **Further recommends** that the Zoning Commission amend the proposed Section 2615.2 to make it clear that roof top antenna equipment cabinets and shelters are not exempt from the existing roof top structure limitations under Section 411 of the Zoning Regulations, by inserting the following subsection:

2615.2(e) – Antenna equipment or shelters shall be subject to Section §411.3 unless otherwise approved by the Board of Zoning Adjustment under Section 2615.3

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BACKGROUND AND STAFF EVALUATION

DESCRIPTION OF PROPOSAL

The proposed action taken by the Zoning Commission consists of adding a new chapter to the District of Columbia Zoning Regulations that will provide comprehensive regulations and standards for telecommunications antennas and their related structures. The action will amend various areas of the existing zoning text, including Chapter 199 – Definitions so as to add definitions for the facilities addressed in the new regulations. The new regulations and pertinent definitions are described below. A complete copy of the proposed text amendment is attached to this report.

The regulations were drafted through numerous public hearings and a public roundtable which was held before the Zoning Commission on March 5, 2001. At this event, testimony was given by representatives of local advocacy groups, Advisory Neighborhood Commissions, industry professionals and Dr. Patricia Elwood, chair of NCPC's Antenna Task Force. At that time, this Task Force was researching the numerous issues related to the siting and mounting of telecommunication facilities on federal buildings, which eventually resulted in the updating of the NCPC Antenna Guidelines on August 2, 2001. The testimony given by Dr. Elwood, approved by the Commission on March 1, 2001 reiterated the need for federal and local regulations to be compatible in their treatment of antennas throughout the District of Columbia. A copy of the official testimony is attached to this report.

The new Chapter 26 – Regulation of Antennas, Antenna Towers, and Monopoles, addresses ground-mounted, roof-mounted, and building-mounted antennas, as well as stealth structures, antenna towers and monopoles. The regulations also provide exemptions for various smaller antenna types and a special exception process for antennas in need of relief from the Zoning

Regulations. The following is a summary of the regulations as proposed by the Zoning Commission.

Regulations for Specific Antennas and Antenna Structures

Ground-Mounted Antennas

Ground-mounted antennas are permitted in all zones. These antennas are installed at grade and are not attached to a building, antenna tower or other structure. The proposed regulations provide that these antennas, when located in a residential, special purposes, mixed-use, or waterfront zoned district, cannot exceed a mounted height of 12 feet at their highest point and only one ground mounted antenna per lot is permitted. In commercial and industrial zones, the antennas cannot exceed a mounted height of 20 feet. The proposed regulations also provide that these antennas can only be located in either rear or side yards and must have a minimum setback of ten feet. In order to limit their visual impact, the regulations further state that antennas shall be screened so that their visibility from public spaces, navigable waterways, historic landmarks and national monuments is minimized to the greatest possible extent, and that antennas shall not be visible from any public park that is within the Central Employment Area or abutting a street.

Roof-Mounted Antennas

Under the proposed regulations, roof-mounted antennas are antennas which are affixed to the roof of a building and will be permitted in all zone districts. Specifically, the regulations define roof-mounted antennas as follows:

Antennas Placed on a Roof – Any antenna and its necessary support structure, not including an antenna tower or monopole, that is attached to the roof of a building and which does not fall within the definition of a building mounted antenna.

The regulations require that these antennas have a one-to-one setback from the edge of the roof, and may not exceed a total mounted height of 12 feet. As with ground-mounted antennas, these roof-mounted facilities and their related equipment cabinets or shelters are required to be screened so that their visibility from public spaces, navigable waterways, historic landmarks and national monuments is minimized to the greatest possible extent. The regulations further state that the antennas and their related equipment cabinets or shelters shall be constructed of materials and colors that blend with the surroundings to the maximum practical extent and that the antenna shall be secured from any recreation space located on the same roof.

Building-Mounted Antennas

The proposed regulations also contemplate antennas that are surface-mounted to buildings or structures. The proposed text amendment defines building-mounted antennas as:

Building-Mounted Antenna- Any antenna and its necessary support structure, not including a tower or monopole, that is attached to the walls of, or integrated into a building, church steeple, cooling tower, elevator bulkhead, parapet, penthouse, fire tower, tank, water tower, or other similar structure.

These antennas will be allowed in all zone districts subject to several provisions. First, the antennas cannot extend above the roof of the wall, building or structure in which they are located. The antennas and their related equipment shall be screened consistent with the provisions of the ground- and roof-mounted antennas, they shall be constructed of materials and colors which blend with the surface on which they are located or they shall be painted to match the surface on which they are attached. Like the roof-mounted antennas, these building-mounted antennas must be secured from any rooftop recreation space.

Stealth Antenna Structures

The proposed text amendment adds a definition and regulations for stealth antenna structures. These are structures commonly used to disguise or screen antennas from public view. Specifically the regulations define these as follows:

Stealth Structures - A structure used or designed to enclose and screen from view antennas. Such structures may include, but are not limited to flag poles, tree poles, and bell towers but not light standards.

Under the regulations, stealth structures may be permitted if the following six conditions are met:

1. The proposed stealth design provides adequate screening of the antennas.
2. The proposed structure is not out of scale with the subject property taking into account the size, setbacks, topography and underlying use of the property.
3. The primary use of the subject property is not single-family residential.
4. The ground equipment of the proposed facility be landscaped, fenced or otherwise screened.
5. The diameter of a stealth flagpole shall not exceed 30 inches at its base.
6. The height of a ground-mounted stealth structure shall be permitted, by right, to a height of 80 feet in all residential zone districts and 120 feet in all other zone districts.

The regulations further provide that when a permit application for a stealth structure is received, the Office of Planning must provide a report and recommendation to the Zoning Administrator.

Antenna Towers and Monopoles

The regulations provide extensive standards which regulate the permitting of antenna towers and monopoles. These are defined by the amendment as follows:

Antenna Tower - A lattice-type structure, guyed or self-supporting, used to support antennas for broadcasting, transmission, reception, or other utility equipment. Such structures shall not be deemed ground-mounted antennas, as that term is used in this chapter.

Monopole - a single, self-supporting pole-type structure, supporting a fixture designed to hold one or more antennas. Such structures shall not be deemed ground-mounted antennas as that term is used in this chapter.

These structures are significantly more restricted in the regulations, as they are only permitted by right in M - General Industry Districts or subject to an approved campus plan. When located in this district, an antenna tower or monopole must be setback from residential property a minimum of its total height from the ground, or otherwise a minimum of 20 feet or a distance of one-third of its height from each surrounding lot line. In terms of height, an antenna tower or monopole may not exceed the maximum height permitted for structures in the zoning district plus 30 feet. The structure can exceed this height limitation if approved by the Board of Zoning Adjustment, and can further be approved in excess of the Height Act of 1910, if approved by the Mayor or his or her agent.

In order to encourage co-location of antennas on antenna towers or monopoles, the regulations require that a written statement be provided to the Zoning Administrator stating that the design of the structure will accommodate at least three antenna arrays and that this space will be available for commercial co-location. Further, the Zoning Administrator cannot take final action on a permit application for an antenna structure or monopole until the Office of Planning has provided a report on the proposed structure.

Aside from the M- General Industry district, the proposed regulations further restrict where antenna structures and monopoles can be located by either making their approval subject to the Board of Zoning Adjustment (BZA) or by making them a non-permitted use. Specifically, a monopole structure is permitted by the BZA in the R (Residential), C-1 through C-4 (Commercial), SP (Special Purpose), CM (Commercial-Light Manufacturing), CR (Mixed-Use), or W (Waterfront) districts. Conversely, antenna towers are permitted by approval of the BZA in C-2 through C-4 (Commercial), SP (Special Purpose), CM (Commercial-light manufacturing), CR (Mixed-use), or W (Waterfront) districts, and are excluded from all R (Residential) or C-1 (Commercial) districts.

Equipment Cabinets or Shelters

Most telecommunication facilities require related equipment cabinets or shelters to house their support technology. Under the proposed regulations, equipment cabinets or shelters are regulated as an accessory structure within that zone district and are required to be compatible with the main structure in architectural character, material and color. If equipment cabinets are to be located on the roof, they will be regulated similarly to how the Zoning Regulations currently regulate roof structures. Specifically, they cannot exceed 18 feet 6 inches in height, must be setback in a one-to-one ratio and must be compatible with the main structure in architectural character, material and color. The regulations further stipulate that the equipment cabinet or shelter must be located on the same building as the antennas which they are supporting.

Height Limitations

Nothing within the proposed text amendment limits the jurisdiction of the Board of Zoning Adjustment to grant variances from the provisions of these zoning regulations. Hence, if an

antenna or its related equipment proposes to exceed the height restrictions contained within the new or existing regulations, the Board of Zoning Adjustment must hear and approve the request. Further, if an antenna proposal seeks to exceed the height limitations set forth in the Height of Buildings Act, then the proposal must be not only approved by the Board of Zoning Adjustment but also by the Mayor as determined by the Act.

Non-Conforming Antennas

Once these regulations take effect, no non-conforming antennas will be permitted to be altered, modernized or otherwise replaced unless they are in conformance with the new regulations. However, if non-conforming antennas cease to function, temporary replacements are permitted for a period of one year, provided that within three months of that time period an application has been made to install longer term replacements.

Exempted Antennas

The regulations as proposed by the Zoning Commission provide an inventory of antennas which are exempted from the zoning requirements. These generally include antennas which are solely enclosed within a building, entirely enclosed on all sides by a roof structure, or located entirely behind, but not taller than, a building's parapet walls.

Specifically, the zoning regulations identify several classes of antennas which are exempt from the new standards. However, the exemption places a cap on how many of these antennas can be installed on a property. Below is a list of these exempted antennas and their number limitation.

- Residential type uhf/vhf television and frequency modulation (fm) radio receiving Yagi antenna not to exceed eight feet horizontally. 2
- Whip antennas not exceeding two and one-half inches in diameter, with a mounted dimension no longer than 12 feet in any direction, and located on a principal building, monopole or antenna tower; except that there shall be no limit on whip antennas that are dedicated to the provision of emergency services to the District of Columbia. 2
- Residential type super high frequency antenna, not to exceed three feet. In any dimension, excluding the support element. 1
- Dish antenna located on the roof of a principal building with a diameter of no more than four feet, not taller than eight feet as measured from the roof surface on which it is mounted, and set back from the edge of the roof a distance at least equal to its height above the roof. The principal building shall have a height of no less than 25 feet. 1
- Whip antenna mounted on a vehicle on private property. 1

FCC Compliance

In order to ensure that all transmitting antennas are compliant with the Federal Communication Commission's (FCC) guidelines on radiofrequency (RF) radiation, no application for a building

permit for a transmitting antenna will be considered unless it is accompanied by a certification evidencing that the proposed antenna will comply with the FCC standards. The certification must also state compliance with the health and safety regulations adopted by the Occupational Safety and Health Administration (OSHA). The regulations further provide that a licensed, professional engineer must perform the certification and all accompanying data and supporting documentation must be submitted with the permit application.

EVALUATION

Given that these regulations will govern the installation of antennas on all private and District of Columbia owned property, there is significant federal interest in ensuring that these antennas will not negatively impact the character and safety of adjacent federal properties. Further, the National Capital is comprised of properties that are either-federally owned and subject to NCPC's antenna guidelines, or private or District-owned property, which would place them under the jurisdiction of the Zoning Regulations described in this report. To maintain a consistent aesthetic of antenna installations in the Nation's Capital, it is critical that both policies are complementary and do not conflict in their treatment of antennas.

The NCPC's Antennas Guidelines were originally adopted in January of 1988. In response to concerns regarding the proliferation of antennas in the National Capital, NCPC formed the Antenna Task Force in 1994 to investigate the various aspects of antenna installations and recommend changes to the 1988 standards. The Commission adopted revisions to the guidelines based on the Task Force's recommendation in November of 1997.

The NCPC Antenna Guidelines require that all antenna installations meet FCC and OSHA Safety standards in order to receive approval from the Commission. Specifically, the requirements state that **rooftop antennas** should be: 1) installed at the lowest possible elevation above the roof line, 2) set back from the edge of the building a distance at least equal to the antenna's height above the roof, and 3) screened as appropriate from any public views in cases in which screening designs compatible with the architectural character of the building can be developed. Similarly, **ground-level antennas** should be: 1) sited in locations that minimize public views, 2) installed at the lowest possible elevation above grade, and 3) screened to the extent practicable by landscaping and screening elements.

The NCPC Antenna Guidelines further establish **exemptions** from the guidelines for certain classifications of antennas. These classifications include:

- Receive-only antennas, with the boom or any active element not exceeding eight feet in any dimension and the mounted vertical dimension not exceeding 12 feet.
- Receive-only whip antennas not exceeding two-and-a-half inches in diameter and a mounted dimension not exceeding 12 feet in any direction.
- Receive-only antennas of any type entirely enclosed within an existing building (including the penthouse portion of a building).

- Receive-only temporary antennas to be mounted on a building, the ground, or a vehicle for a period not to exceed 60 days, provided the temporary placement does not alter the site or building and that all necessary safety precautions are observed in the temporary placement.

The NCPC Antenna Guidelines further provide standard on what types of antennas can be approved through delegated action and what is required to be presented to the Commission for full report and review.

The proposed regulations are generally consistent with the NCPC's Antenna Guidelines in their treatment of ground, building, and rooftop mounted antennas. The regulations set specific setback and location standards for the installation of antennas so as to encourage their siting in areas away from general public view or sensitive view sheds. Similar to NCPC's Antenna Guidelines, the regulations require that the materials and colors of antennas be consistent with the building on which it is affixed, so as to limit its visibility. The exemptions provided in both standards are consistent in that they both account for smaller antennas which may be located entirely within a structure, or are minor in nature. Further, neither policy exempts transmitting antennas, which require more stringent controls due to their environmental hazards.

A critical component of NCPC's Antenna Guidelines is the time limitation placed on antenna approvals. Under the regulations, approvals of antenna installations on federal property are limited to five years and may be increased to ten by the discretion of the Commission. The intent of this requirement is to ensure the removal of antennas whose use has been discontinued by requiring the submitting agency to reevaluate its antenna installations. The proposed zoning regulations manage the issue of antenna removal in a different manner. Section 2616.1 of the proposed regulations require that any antenna, antenna tower, monopole, equipment cabinet, or equipment shelter must be removed at the owner's expense if its use has been discontinued for a period of one year. While this provision differs from the periodic reauthorization approach of NCPC's Antenna Guidelines, it is staff's position that it will reach the same objective and is appropriate. With NCPC's time frame, an antenna that becomes discontinued within a year of its approval, for example, may remain in place for another four years. Under the zoning regulations, however, an antenna whose use has been discontinued for one year must be removed as soon as possible. Staff acknowledges the administrative challenges that the District of Columbia government would face if it required the numerous providers and property owners in its jurisdiction to reauthorize their antenna installations on a periodic basis.

The proposed Zoning Regulations' treatment of rooftop equipment structures seeks to treat rooftop equipment structures similarly to penthouse and other roof structures regulated in the existing Zoning Regulations. Under the existing regulations, rooftop structures are limited to one per building, unless authorized by the Board of Zoning Adjustment under Section 411. By amending 411.15, the new antenna regulations will exempt equipment cabinets and shelters from the provisions of 411, however, they do not clarify whether or not an equipment shelter is deemed a rooftop structure and therefore subject to the one per building limitation. Under staff's interpretation, the new regulations do not limit the number of rooftop equipment cabinets and shelters and therefore could allow for unlimited structures to be built, which is clearly inconsistent with the intent of the existing Zoning Regulations. **To address this issue, staff recommends that the Zoning Commission include an additional subsection (e) to the**

proposed Section 2615.2 to make it clear that roof top antenna equipment cabinets and shelters are not exempt from the existing roof top structure limitations under Section 411 of the Zoning Regulations. This proposed new subsection should read: “Antenna equipment or shelters shall be subject to Section §411.3 unless otherwise approved by the Board of Zoning Adjustment under Section 2615.3.”