

REQUEST FOR BOARD ACTION

HENDERSON COUNTY PLANNING BOARD

MEETING DATE: November 16, 2023

SUBJECT: LDC Text Amendment – TX-2023-05, Communication Facilities Category One (1) or Two (2)

PRESENTER: Autumn Radcliff, Planning Director
Matt Champion, Zoning Administrator

ATTACHMENTS: 1. Draft Amendment
2. Fall Zone Letter Example

SUMMARY OF REQUEST:

Planning staff received an application for a text amendment (#TX-2023-05) to add language that would allow engineers to submit specific letters detailing fall zones and therefore reducing the separation and easement acquisition requirements. The Land Development Code (LDC) permits Communication Facilities Category One (1) and Category Two (2) by right in all zoning districts.

The Technical Review Committee (TRC) reviewed the proposed text amendments during their November 7, 2023, meeting. The TRC moved to forward the proposed amendment to the Planning Board.

BOARD ACTION:

The Planning Board is requested to make a recommendation on the proposed amendment before forwarding to the Board of Commissioners. The Board of Commissioners must hold a public hearing prior to adopting any amendments to the Land Development Code.

Suggested Motion: I move that the Planning Board send forward a favorable recommendation on the proposed text amendment TX-2023-05 and find that these changes are consistent with the County Comprehensive Plan.

LDC Text Amendment (TX-2023-05)

Recommended changes are highlighted.

Communication Facilities Category One (1) or Two (2)

Summary:

Staff received an application for a text amendment request (#TX-2023-05) to add language that would allow engineers to submit specific letters detailing fall zones and therefore reducing the separation and easement acquisition requirements. The Land Development Code (LDC) permits Communication Facilities Category One (1) and Category Two (2) by right in all zoning districts.

Definition:

Fall Zone – The area in which a wireless support structure may be expected to fall in the event of a structural failure, as measured by engineering standards.

§42-266. Category One (1) or Two (2) Communication Facility Permits (C. Application) (2. Application) (f. Easement Acquisition Documents)

- f. Easement Acquisition Documents. Statements of intent, submitted by the *applicant*, from adjacent property *owners* (where any portion of said property is within a distance of the tower height from the tower base) to grant an *easement* to the *applicant*. **Or the applicant can submit a fall zone letter, sealed by an engineer, identifying the towers specific fall radius.**

SR 9.3. Communication Facilities (3. Communication Facility Specific Standards) (b. Category Two (2) (5. Separation from Existing Occupied Buildings)

5. Separation from Existing Occupied Buildings. *Communication towers* must be constructed a minimum distance equivalent to 110 percent of the height of the proposed *communication tower* from existing occupied *structures*. *Communication towers* unable to conform to *occupied building* separation requirements may submit affidavits of understanding from the *owners* of property and/or *structures* within the 110 percent height radius in place of conforming to the separation standards. Affidavits of understanding shall state that the property *owners* do not object to the construction of the *communication tower* as proposed in the application, and agree to hold the County harmless from any and all liability for the location and construction of the *communication tower* as proposed in the application. Such affidavits should also site the specific plan or drawing reviewed by the property *owner*. **Or the applicant can submit a fall zone letter, sealed by an engineer, identifying the towers specific fall radius.**

February 14, 2022

[REDACTED]

[REDACTED]

Alpharetta, GA 30004

RE: Proposed 150' Monopole for East Ridge, GA (Sabre Quote #22-4680-JDS)

[REDACTED]

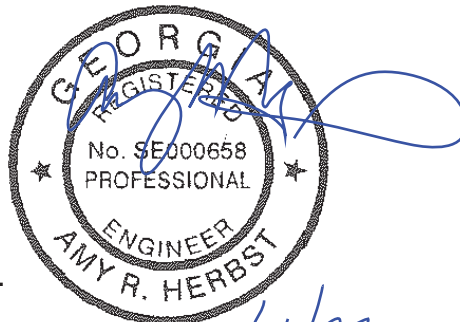
Upon receipt of order, we propose to design and supply a monopole and foundation for the above referenced site. The monopole and foundation will be designed for a basic wind speed of 105 mph without ice and 30 mph with 1" ice, Risk Category II, Exposure Category B and Topographic Category 1, in accordance with ANSI/TIA-222-H.

When designed according to this standard, the wind pressures and steel strength capacities include several safety factors. Therefore, it is highly unlikely that the monopole will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors.

Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within the monopole shaft, above the base plate. Assuming that the wind pressure profile is similar to that used to design the monopole, the monopole will buckle at the location of the highest combined stress ratio within the monopole shaft. This is likely to result in the portion of the monopole above leaning over and remaining in a permanently deformed condition. **Please note that this letter only applies to the above referenced monopole designed and manufactured by Sabre Towers & Poles.** This would effectively result in a fall radius less than or equal to 75 feet.

Sincerely,

Amy R. Herbst, P.E., S.E.
Senior Design Engineer



2/14/22