



**LINCOLN COUNTY PLANNING & INSPECTIONS DEPARTMENT**  
302 NORTH ACADEMY STREET, SUITE A, LINCOLNTON, NORTH CAROLINA 28092  
704-736-8440 OFFICE 704-736-8434 INSPECTION REQUEST LINE 704-732-9010 FAX

To: Board of Commissioners  
Planning Board

From: Randy Hawkins, Zoning Administrator

Date: November 18, 2016

Re: UDO Proposed Amendments #2016-5  
SCI Towers, Inc., applicant

*The following information is for use by the Lincoln County Board of Commissioners and the Planning Board at their joint meeting/public hearing on December 5, 2016.*

**APPLICANT'S PROPOSAL**

The applicant is proposing an amendment to Section 2.5.4.B.5 of the Lincoln County Unified Development Ordinance to exempt wireless communication towers from the Airport Overlay District's height limits in the horizontal and conical zones, provided an applicant for a conditional use permit demonstrates compliance with all Federal Aviation Administration standards and receives approval from the FAA for the construction of a proposed tower.

**BACKGROUND INFORMATION**

The Airport Overlay District standards establish four three-dimensional zones surrounding the Lincolnton-Lincoln County Regional Airport, each with its own height limits based on the airport's elevation of 878 feet above mean sea level:

- 1) The approach zone, which extends from both ends of the runway and gradually widens out, sloping upward as it does.
- 2) The transitional zone, which extends alongside both sides of the runway and the approach zone and also slopes upward.
- 3) The horizontal zone, which starts at the edge of the approach zone and transitional zone and extends 10,000 feet from the center of the runway in all directions.
- 4) The conical zone, which starts at the edge of the horizontal zone and slopes upward as it extends 4,000 feet horizontally in all directions.

The proposed amendment would not apply to the approach and transitional zones, only to the two outer zones.

In the horizontal zone, the UDO sets the maximum height at 100 feet above the airport elevation, or 978 feet above sea level.

In the conical zone, the maximum height increases by one foot for each 20 feet outward from the horizontal zone, reaching 1,178 feet above sea level at its outer edge.

When an Airport Zoning Ordinance was adopted in 1979, the maximum height in the horizontal zone was set at 150 feet above the airport elevation, based on FAA guidelines that remain in effect today. The ordinance was later amended to reduce the maximum height in the horizontal zone to 100 feet above the airport elevation. The airport ordinance was incorporated into the UDO when it was adopted in 2009.

Under the UDO, a conditional use permit is required for any wireless communication facility in excess of 60 feet in height. The maximum height that may be permitted is 325 feet.

The Federal Aviation Administration conducts studies to determine whether proposed wireless communication towers pose a hazard to air navigation.

SCI Towers is proposing the construction of a 108-foot tower about 1.35 miles from the local airport. The elevation of the proposed site is 932 feet above sea level, which would place the tower's height at 1,040 feet above sea level, or approximately 163 feet above the airport's elevation.

The FAA has issued a determination that the proposed structure would not be a hazard to air navigation provided the structure is marked/lighted in accordance with FAA regulations.

The full text of the Airport Overlay District standards, with the proposed amendment highlighted, is included with this packet along with the application to amend the UDO.

#### STAFF'S RECOMMENDATION

Staff recommends approval of the text amendment. See proposed statement on following page for rationale.



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### **Zoning Amendment Statement of Consistency and Reasonableness**

Case No. **UDO Proposed Amendment #2016-5**

Applicant **SCI Towers, Inc.**

Proposed amendment

**Amend Section 2.5.4.B.5 of the Lincoln County Unified Development Ordinance to exempt wireless communication towers from the Airport Overlay District's height limits in the horizontal and conical zones, provided an applicant for a conditional use permit demonstrates compliance with all Federal Aviation Administration standards and receives approval from the FAA for the construction of a proposed tower.**

This proposed amendment **is not consistent** with the Lincoln County Comprehensive Land Use Plan and other adopted plans in that:

**The Land Use Plan does not address the issue of height restrictions in the area surrounding the Lincolnton-Lincoln County Airport.**

This proposed amendment **is reasonable and in the public interest** in that:

**Mobile phones have become increasingly important as a means of communication, including for emergency calls. Mobile phone technology relies largely on towers to transmit signals. The Federal Aviation Administration is responsible for regulating aviation safety and conducts studies to determine whether proposed towers pose a hazard to air navigation.**



## **UDO Text Amendment Application**

Lincoln County Planning and Inspections Department  
Zoning Administrator  
302 N. Academy St., Suite A, Lincolnton, NC 28092  
Phone: (704) 736-8440 Fax: (704) 732-9010

### **Part I**

Applicant Name SCI Towers, LLC

Applicant Address 207 Harbour Place Dr., Davidson, NC 28036

Applicant Phone Number c/o Attorney Christopher Duggan 704-776-9610

### **Part II**

Briefly describe the proposed text amendment.

This text amendment requests an additional exemption from the height limitations within the airport overlay district ("AOD") to allow for the necessary construction of wireless communication towers under Article 2.5.4.B.5. Currently there is a significant gap in the wireless communications services for those residents living in or traveling through the AOD due to the unduly strict restrictions on heights. The allowance for the construction will enhance the capacity of wireless customers which include police and fire as well as other first responders.

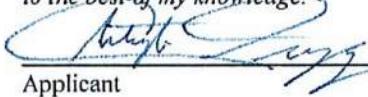
### **Part III**

Provide the full text of the proposed amendment (on a separate sheet if necessary) with proposed deleted text shown as struck through and proposed added text underlined.

See attached.

**\$400 APPLICATION FEE MUST BE RECEIVED BEFORE PROCESSING.**

*I hereby certify that all of the information provided for this application and attachments is true and correct to the best of my knowledge.*

  
\_\_\_\_\_  
Applicant

10/21/16  
\_\_\_\_\_  
Date

## §2.5.4.

**B. Height Limitations****5. Excepted Height Limitations**

- a.** Nothing in this subsection shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree to a height up to 50 feet above the surface of the land. Height shall be measured from the highest point on the ground along the periphery of the structure or tree to the highest point on the structure or tree.
- b.** Nothing in this subsection shall be construed as prohibiting the construction of a wireless communication tower within the horizontal or conical zone provided the applicant is able to demonstrate compliance with all Federal Aviation Administration (FAA) standards and regulations and receive approval from the FAA for the construction of the proposed tower.

## **UDO Proposed Amendment #2016-5**

*Text proposed to be added is underlined.*

### **§2.5.4      Airport Overlay (-AO)**

#### **A.      Airport Zones**

In order to carry out the provisions of this district, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as the apply to the Lincolnton-Lincoln County Regional Airport. Such zones are shown on the Lincolnton-Lincoln County Regional Airport Zoning Map consisting of one sheet, representing the current version on file in the Planning and Inspections Department, which is attached to this subsection and made a part hereof. An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

##### **1. Runway Larger Than Utility with a Visibility Minimum Greater Than $\frac{3}{4}$ Mile Non-precision Instrument Approach Zone (Approach Zone)**

The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 3,500 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.

##### **2. Transitional Zone**

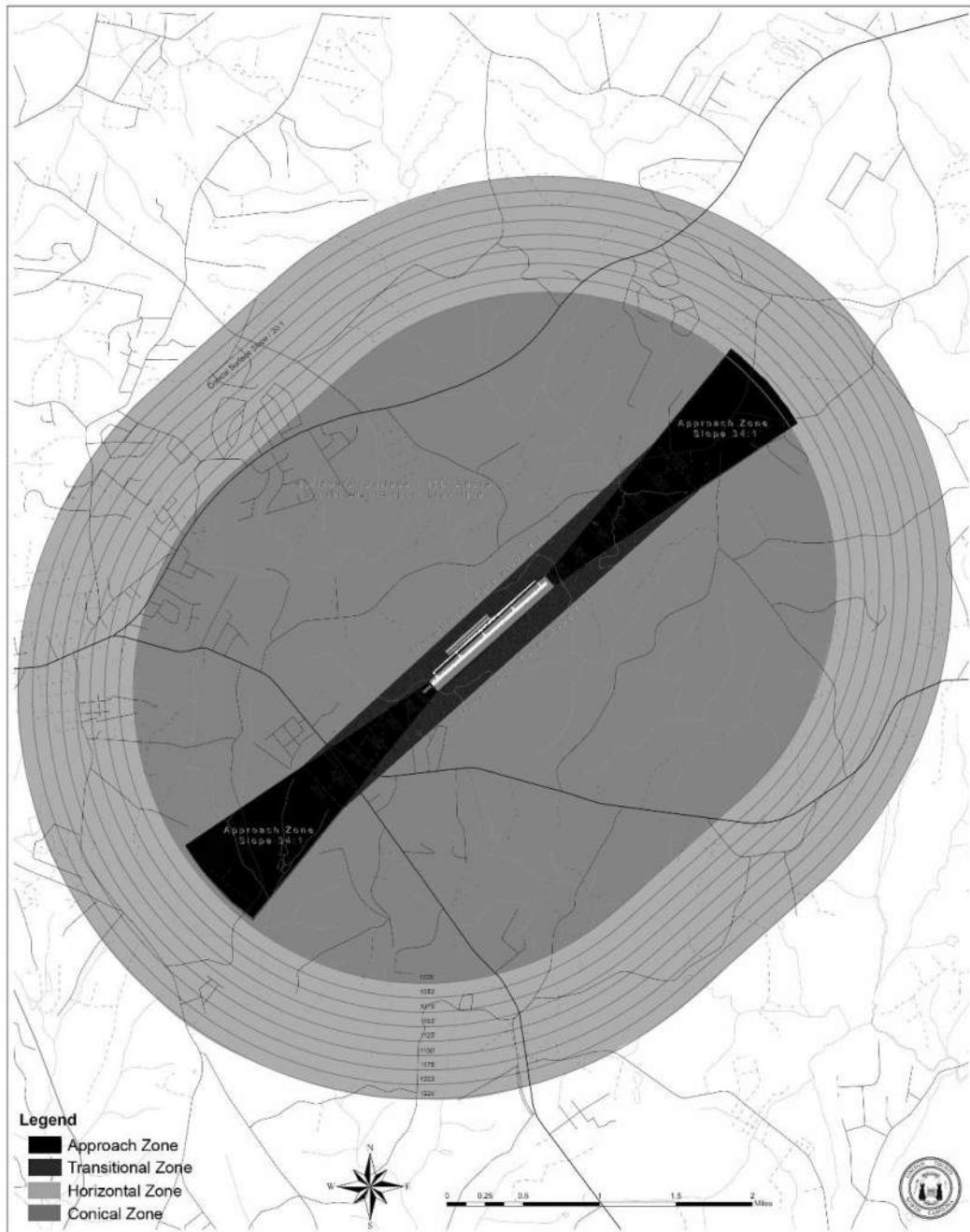
The transitional zone is the areas beneath the transitional surfaces. (*Note: The definitions section of the UDO defines “transitional surfaces” as follows: “These surfaces extend outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces, which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at 90 degree angles to the extended runway centerline.”*)

##### **3. Horizontal Zone**

The horizontal zone is established by swinging arcs of 10,000 feet radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.

#### 4. Conical Zone

The conical zone is established as the area that commences at the periphery of the horizontal zone and extends outward there from a horizontal distance of 4,000 feet. The conical zone does not include the transitional zone.



## B. Height Limitations

Except as otherwise provided in this subsection, no structure shall be erected, altered or maintained, and no tree shall be allowed to grow in any zone created by this subsection to a height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

### **1. Runway Larger Than Utility with A Visibility Minimum Greater Than $\frac{3}{4}$ Mile Non-precision Instrument Approach Zone (Approach Zone)**

Such runway slopes 34 feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.

### **2. Transitional Zone**

The transition zone slopes seven feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 100 feet above the airport elevation which is 878 feet above mean sea level.

### **3. Horizontal Zone**

The horizontal zone is established at 100 feet above the airport elevation or at a height of 978 feet above mean sea level.

### **4. Conical Zone**

The conical zone slopes 20 feet outward for each foot upward beginning at the periphery of the horizontal zone and at 100 feet above the airport elevation and extending to a height of 300 feet above the airport elevation.

### **5. Excepted Height Limitations**

(a) Nothing in this subsection shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree to a height up to 50 feet above the surface of the land. Height shall be measured from the highest point on the ground along the periphery of the structure or tree to the highest point on the structure or tree.

(b) Nothing in this subsection shall be construed as prohibiting the construction of a wireless communication tower within the horizontal or conical zone provided the applicant to able to demonstrate compliance with all Federal Aviation Administration (FAA) standards and regulations and receive approval from the FAA for the construction of the proposed tower.

## C. Use Regulations

No use may be made of land or water within any zone established by this subsection in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.

**D. Nonconforming Structures and Trees in -AO District**

See §10.6.

**E. Permits**

**1. Future Uses**

- (a) Except as specifically provided in (b), (c), and (d), below, no material change shall be made in the use of land, and no structure or tree shall be erected, altered, planted or otherwise established in any zone of the -AO district prior to the approval of a zoning permit pursuant to §9.9. No permit for a use inconsistent with the provisions of this subsection shall be granted unless a variance has been approved in accordance with §1.1.1.E.3.
- (b) In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than 70 feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such tree or structure would extend above the height limits prescribed for such zones.
- (c) In areas lying within the limits of the approach zones, but at a horizontal distance of not less than 4,200 feet from each end of the runway, no permit shall be required for any tree or structure less than 70 feet of vertical height above the ground, except when such tree or structure would extend above the height limit prescribed for such approach zones.
- (d) In the areas lying within the limits of the transition zones beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure less than 70 feet of vertical height above the ground, except when such tree or structure, because of terrain, land contour, or topographic features, would extend above the height limit prescribed for such transition zones.
- (e) Nothing contained in any of the foregoing exceptions shall be construed as permitting or intending to permit any construction, or alteration of any structure, or growth of any tree in excess of any of the height limits established by this subsection except as set forth in §1.1.1.B.5. In the event a tree is allowed to grow in excess of the height limits established by this subsection, except as set forth in §1.1.1.B.5, said tree shall be removed, topped, trimmed, or otherwise modified to bring into compliance with this subsection. If the Director determines that the tree adversely affects the safe use of the airport, Lincoln County will pay for the direct cost to remove, top, trim, or otherwise modify said tree to bring into compliance with this subsection.

**2. Existing Uses**

No permit shall be granted that would allow the establishment or creation of an airport obstruction that is a hazard to air navigation or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of this subsection or any amendments thereto or that it is when the application for a permit is made. Except as indicated, all applications for such a permit shall be granted.

**3. Variances**

- (a) Any person desiring to erect or increase the height of any structure, or permit the growth of any tree, or use property, not in accordance with the regulations prescribed in this subsection, may apply to the Board of Adjustment for a variance from such regulations in accordance with the requirements of §9.8.
- (b) The application for variance shall be accompanied by a determination from the Federal Aviation Administration as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace.
- (c) Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations will result in unnecessary hardship and relief granted, will not be contrary to the public interest, will not create a hazard to air navigation, will do substantial justice, and will be in accordance with the spirit of this subsection.

#### **4. Obstruction Marking and Lighting**

Any permit or variance granted may, if such action is deemed advisable to effectuate the purpose of this subsection and be reasonable in the circumstances, be so conditioned as to require the owner of the structure or tree in question to permit the Lincolnton-Lincoln County Regional Airport Authority at its own expense, to install, operate and maintain thereon such marking and lights as may be necessary.

#### **5. Approval Required**

The Director shall review all applications for development to ensure compliance with all regulations of this subsection. All applications shall be complete prior to review by the Director. The Director in his discretion may request that additional information be submitted as necessary to insure a thorough and complete review of the application. All applications shall be submitted with a non-refundable fee in accordance with a fee schedule adopted by the Board of Commissioners.