

**GADSDEN COUNTY BOARD OF COUNTY COMMISSIONERS
PLANNING COMMISSION WORKSHOP MINUTES**

**Thursday, February 6, 2014 6:00p.m.
Board of County Commissioners
Meeting Room
7 East Jefferson Street
Quincy, Florida**

Present: Commissioner Regina Davis, At - Large Member, Chair
Commissioner Edward Allen, Vice – Chair
Commissioner Dr. Gail Bridges – Bright (absent)
Commissioner Diane Sheffield
Commissioner Larry Ganus
Commissioner Mari VanLandingham (absent)
Commissioner David Tranchand
Commissioner Frank Rowan (absent)
Commissioner William Chukes
Commissioner Ed Dixon (absent)
Commissioner Catherine Robinson
Commissioner Isaac Simmons, School Board Representative
Allara Gutcher, Planning & Community Development Director
Willie Brown, Principal Planner
Beryl H. Wood, Deputy Clerk

1. PLEDGE OF ALLEGIANCE

Chair Davis called the meeting to order at 6:00 p.m. with a quorum and led in the Pledge of Allegiance to the U.S. flag.

2. INTRODUCTION OF MEMBERS/ROLL CALL

Each member present stated his or her name and district for the record.

3. DISCLOSURES AND DECLARATIONS OF CONFLICT - None

WORKSHOP

- 4. PRESENTATION – Communication Towers (LDR-2013-02) – Proposed Ordinance amending Chapter 5, Subsection 5800 of the Gadsden County Land Development Code revising the communication tower regulations.(Allara Gutcher, Planning &**

Community Development Director) & PRESENTATION – Communication Antennas, Towers, and Structures presented by Telecommunication Industry Representative Art Peters. (Arthur K. Peters Consulting Engineers)

Chair Davis disclosed she had public comment forms from Dr. Arnold and Marion Lasley, and for tonight's discussion there would not be a 3 minute limit for them.

Mrs. Gutcher recalled November 2013 discussion the ordinance then referenced the red line version of 5800 Communication Antennas, Towers, and Structures amendments. She discussed the different versions of section 5800 presented, which also included comments from Mr. Arthur Peters. She said his version is a clean version of the proposed changes and the strike though underlined on that versions are comments that Mr. Peters has made to suggest changes to the proposed version. She stated they would go through the proposal and address any comments that might arise. She briefly gave a biography of Mr. Peters stating he was an expert in the field. He works for local governments helping them get through telecommunication amendments to the Code. She mentioned he was very experienced and does a lot expert testimony on the subject and was there to answer any questions.

Mr. Art Peters, professional engineer out of Gainesville, appeared before the Board and introduced himself. He disclosed he had designed a lot of cellular systems in many different areas. He said he was here to answer any questions and looked forward to a great working relationship with them and would be assisting with updating the Land Development Code (LDC). He named some of his past works such as the Boston System, Los Angeles System, Miami, Atlanta, Palm Beach, Texas, New Orleans, and throughout the Country. He commented he has a lot of experience in the field and I currently reside in the State of Florida and pointed out that he worked for counties and cities. He mentioned he does not work for cellular companies. He said mainly there are a lot of people writing Codes that want their communities kept safe and sane and they don't need a basis view of people wanting towers going in certain places. He noted that he recommended some changes as reflected in the redline version of the handout, but after hearing from the Commission would amend further if so desired.

Chair Davis said they would entertain questions from Commissioners starting from the left and continuing on.

Commissioner Simmons commented on 5807 Design Standard of the red line version; *the maximum height of a communication antenna, tower or structure shall be two-hundred fifty (250) feet.* He said his question is related to the collapse rate, if they fall.

Mr. Peters stated if it's not a lattice tower, cross members on 3 or 4 legs can be designed so if they collapse and it would be in pieces, if wind comes along their places on that tower that are made to collapse at lower wind speed than the fall speed of the tower. As the wind increases this tower will break and only a section would fall off and eventually it all would fall in fairly small circle.

Commissioner Simmons asked if a house that was within a 150ft would be safe.

Mr. Peters responded that was correct, but it also depends on the type of tower. He said if someone proposes to build a tower you need to ask what kind of tower, is this tower designed to fall and break apart in a wind.

Commissioner Simmons last questioned related to amending the Ordinance as it relates to cell towers and structures."Do we have in here, where any new tower, after this new legislation came out will be of that type."

Mr. Peters replied he couldn't speak for the county, but he would recommend that. He said he assumed he would be helping county write that into the specification and do in a proper fashion to make certain that is what happens.

Mrs. Gutcher said right now the regulations don't specify on the type of tower that someone can install.

Chair Davis asked was there a reason for that.

Mrs. Gutcher responded no.

Commissioner Ganus asked Mr. Peters to expound on the types of towers.

Mr. Peters responded lattice towers can be of two type one of free standing self supporting tower one that wide base and narrows as it goes up and no guyed wires. This tower could possibly fall 200ft or 250ft. The ones that are narrow and also lattice, that are guyed most of the time will not fall down, depending on the number of guys. These are all technical issues that the applicant when we they put in an application need to specify the kind of tower and any recommendation that you have for a fall radius. In general the taller towers up to 2,000ft are straight lattice towers and they are all guy wired. Small lattice towers are the ones at the Fire Department and the Police Department, everybody has this kind. The height of the tower depends how far the tower has to transmit and what the terrain is around it.

Commissioner Ganus commented that he heard cell towers were no good pass a ½ mile and asked how far where towers reach?

Mr. Peters replied towers will reach 4-6 miles depending. He gave history on cell design. The first cell site to go into a community has capability however many channels that can operate from that cell tower at a single time. If you have 30-40 channels on there you can carry 30-40 conversations at a time. The 44th guy that wants to come in and make a call get's kicked out. The next cell tower that is put in will probably have the same number of channels put in, but they can know take calls from anybody in the area of the 2 towers. If these cell towers all calls are in use, then the other cell tower can handle it typically.

Commissioner Ganus asked at what distance and could you add to existing towers for more coverage.

Mr. Peter's responded frequency has changed and they run now 4-6 miles. The only way you can increase the number of people is by putting in additional towers. If you want to serve 40 people and you have 40 channels then you can serve them. If you now have 200 people and only 40 channels you can't serve all those people. You then would add another tower and that will do 80. He said you could add to existing towers but, run into a finite of how many people you can serve from a single tower. You can double the number but, as soon as you double the number you put the channels, say you have 40 channels on this one, you put another 40 on the existing one. He added you can do that only if there are no other towers around. You have to remember you only have a finite number of channels in a pool that you can use. If you take 40 channels and add it too it, you can't use those same 40 channels anywhere close because there has to be a separation distance or they interfere with each other.

Commissioner Robinson clarified isn't there more than one carrier on each tower.

Mr. Peters said yes, each company that provides cell service will have its own set of channels. One company channels don't serve people of other companies. It's a finite number of channels; the number of people each cell site serves is pretty much a fix thing. In a particular system if a cell site serves 100 customers then if you want to serve 200 customers you need another cell and it becomes repetitious. The distance a cell can serve changes with a number of cells in the system. As the number of cells in the system increases than the number of cells serve a smaller area and that's how they get more people on it.

Commissioner Ganus inquired about the new smart phones which require greater data and services impacted the number of towers that are required. He also asked how many channels are available to providers.

Mr. Peters replied absolutely. The more traffic that's put over those channels, the more channels you have to have to serve that traffic because you only have a finite amount of data that can be served on a one telephone conversation. He said as far as the number of channels available to providers it is 333 channels in a band. "It is not a good criterion as to how much traffic can be handled over the channels. What should be discussed is the bandwidth. As the number of cells increases the requirement for tall towers diminishes the requirement for high power diminishes, so each cell know is serving a smaller and smaller area because there are more and more cells coming in."

Commissioner Ganus discussed a Comprehensive Tower Plan.

Mr. Peters said cells go in first where there are people, and then they go in on how much traffic is generated by that group of people. If you have a cell with a whole lot of traffic such as people are watching television, then you would have to increase capacity of that cell. You still are confined to a finite number of channels and you can only have

so much information going over channels, you would have to split that cell to get more information out.

Commissioner Simmons pointed out they are here to discuss design and cell capacity issues and felt it would hinder progress by entertaining other topics of discussion. He asked for the definition on towers and justification of need. “What’s the fall radius of your tower?”

Mr. Peters stated he was correct they would get bogged down. “Cells are there to serve people and if you have a demand to provide more service and if it’s located near a community you would have to put in another cell because it’s a capacity issue at that point. The height of tower, early in the cell system you want tall towers so they will cover big areas, but as you start increasing capacity your cell towers go down you want to lower those tower heights so they don’t transmit quite so far, so you can repeat them.”

Mr. Peters responded on the need that every Code he had written requires justification of the need. You can’t just come in a slap a tower up if it’s not necessary. I would recommend that is the way you run it.

Chair Davis stated so far the two things she heard was to define the type of tower and the justification of need.

Mr. Peters said the question you need to ask an applicant is what the fall radius of your tower is and who it is certified with.

Commissioner Chukes asked about the falling of towers and gave for example if a tower falls within a 100ft. He also concerned with putting towers close to one’s resident.

Mr. Peters said he has written Codes that say based on the fall radius of tower, if the tower is located within so many feet of some boundary; you have to prove that the fall radius will not allow it to fall within that adjacent boundary. He stressed the concern of putting towers too close to one’s resident differs with each county. He said his personal recommendation is what you don’t want to do is exclude a tower where it might be necessary. The current Code states you have to be a ½ mile from the nearest rural residential lot. You may have a need to put a tower in the middle of residential neighborhood to provide good coverage. He recommended that the Code allow for recommendation of towers in residential areas provided that their fall radius is averted in some way.

Commissioner Ganus asked about fall zones during hurricanes and tornados and could fall zones be defined?

Mr. Peters said the modern towers have a design break and if the wind gets above a certain pressure this section of the tower would break and it would probably be 10ft

long. Yes, fall zones can be defined by the type tower in feet. He said technically the best way is fall zone boundary.

Commissioner Ganus commented on 5805: Code locations the change of 180ft to 110ft feet in height. He asked about lighting requirements.

Mr. Peters said you don't want to place so many restrictions were vendors don't want to come in and put cell towers in. He suggested anything above 110ft, we to make sure we provide for x number of users. If you want to go above a 110ft you had better put enough capacity in that tower to accommodate to 4, 5 or whatever number of people. Get enough provision for anyone who might want to use that tower. On the lighting requirement he said if it is less than 250ft there is no lighting requirement.

Commissioner Sheffield asked how lighting was addressed and about subsection 5807: Illumination: *Lighting above twenty (20) feet on the structure or within the compound of the structure, tower, or antenna is limited to that which is **required** by the Federal Aviation Administration or other federal agencies.* She asked about 58108 on page 9: She referenced it called for type 1 review procedures as specified in subsection 7202 of this Code, but under subsection 5806 it says there is a type 2 administrative review. Said she preferred the type 2 review, because it is emotional for citizens. She voiced it should be changed to type 2 review.

Commissioner Ganus briefed Mr. Peters on the difference between type 2 review, which comes before the public hearing, Commission and Board and type 1 has no outside review by public or anyone.

Mrs. Gutcher pointed out required is key word. She stated that Type 1 is whatever meets Code, not personal choices.

Mr. Peters discussed unipol's. He said the Code should try to push people into a more desirable type of tower by offering an incentive like a type 1 versus a type 2 approach. He recommended offering a type 1 review to all unipol towers of a certain height and all others type 2.

Consensus: Recommendation Type 2 Review (all input) Use by right would be struck throughout.

Commissioner Sheffield said they struck out requirement that an applicant must demonstrate that they have exhausting all ways of finding an existing tower to locate on, but did you restate someone else. She said they want providers to put equipment on existing towers. "Do we want providers to try and co-locate."

Mrs. Gutcher commented part of the type 1 review was the co-location. *She referenced 5805: Planning for additional capacity on existing and new towers and structures is mandatory.*

Mr. Arnold who makes decision for carriers that wants to co-locate on towers.

Mr. Peters replied the carrier themselves; it's up to them who they allow. They are happy to accommodate anybody who wants to go on to their tower for any reason, because it's income to them. Each cellular company carrier has a network and this network is carefully laid out and it grows. The system is set up so these cells are interactive; they talk to each other and can carry people from one cell to another.

Commissioner Sheffield commented on page 4 of 5806: *Telecommunications towers proposed to be located less than 3500 feet from an existing telecommunications tower must submit technical details as to why their proposed antennas cannot be deployed on the existing structure.*

Mr. Peters responded all applicants must show why they can't locate on existing towers. A list of technical requirements, that any tower they put up would be registered with the County, so the County can maintain database of tower locations.

Commissioner Robinson commented on Mr. Peter's comments subsection 5801 Purpose and Intent: "Who regulates in the city, I see the county." She questioned the space between towers.

Mrs. Gutcher said the City regulates the City.

Mr. Peters said one of the technical requirements show adjacent towers to the one they are proposing. He said long ago they did specify space between towers, they no longer do that.

She questioned would all 6 requirements need to be met on landscaping on page 5.

Mrs. Gutcher said all is required.

Commissioner Allen asked about each tower having 30 cells per 100 customers or is it generality.

Mr. Peters said that is not a bad estimate of what goes on in a cell but it depends on the amount of channels they put in. He said basically it is based on demand.

Mr. Allen asked would Mr. Peters be able to help write regulations.

Commissioner Tranchand asked about towers aging out. He asked are they trending everywhere to short or tall towers.

Mr. Peters said towers normally run 20 years, sometimes more. It has to be maintained. The trend is to downsize towers. He said the trend only applies to those communities who have capacity issues.

Mr. Tranchand questioned assigning IP addresses.

Mr. Peters commented if assigning IP addresses to someone for any reason has an impact on the usage of the network then there is going to be an increase in the number of cells. If there more traffic then there is a need for more cell towers.

Commissioner Sheffield inquired about radiation. "I know that the representatives always say they can't answer questions on that subject and I guess that's because they aren't scientist."

Mr. Peters pointed out what you're prohibiting from doing is considering radiation hazards or making any type of public judgment. He said radiation hazards are not a hazard when handled properly. "It is studied intensely, it's a worldwide concern."

Dr. Anthony Arnold questioned lighting red strobes. "The reasons they wrote the original ordinance the way they did, was one of the primary objections from citizens were they didn't want to look at a flashing red light or flashing strobe light outside their window at night." He said they make really generous setback rules, 7 times the tower height. Basic logic was based on lot sizes and tree heights in the County and then top of tower would not be visible if it was 7 times the tower height from the property line and that was more for red light towers. He said they need to pay attention to lighting in setbacks.

Mr. Peters said you don't have to have specifics it is any tower that is built under your jurisdiction will perform to FAA/FCC rules.

Mrs. Gutcher said it relates now to FAA regulations. "You can introduce setbacks that are acceptable or you can make a tower height limit to 199 feet."

Mr. Peters said you may need tower above 200ft. He said he would forward that section of FAA to Dr. Arnold.

Mrs. Gutcher said new lights would shield up not down, due to FAA regulations.

Marion Lasley commented the wording of no strobe lighting has been removed. Original language in ordinance needs to be kept. I'm concerned by the usage of word residence. Co-location "I want a map of all towers and co-location, to show they are max out." She said would like chart thrown out and original kept. The intent of original ordinance was not too build many towers, one tower for as many carriers as possible. It should be required, stronger language. Fall zone, the whole concept, terrible. Setbacks are too close. "For a complete list of Mrs. Lasley's comments, you can visit the Clerk's Office or Planning Department."

Mr. Peters said it is governed, you can't design their system.

Dr. Arnold presented original ordinance.

Commissioner Simmons commented there is more work that needs to be done on this.

Commissioner Davis suggested a chart might be easier than all the handouts. She gave for example 3 columns for all the changes such as suggestive language from redline, Peters/Staff, original and others, who is in agreement or not.

Mrs. Lasley noted that she had already made her comments.

Commissioner Sheffield suggested the chart from the EAR Amendments.

Mrs. Gutcher asked Mrs. Lasley to meet with her on so they can discuss her concerns.

Mr. Brown commented on camouflage towers. He said they have had 3 towers in the last 3 years for approval.

Mrs. Gutcher pointed out as a type 2, administrative review you have to have basis to deny the tower.

4. PLANNING COMMISSION COMMENTS/QUESTIONS/NEXT MEETING

It was determined that the next meeting/workshop would be set by staff.

5. PUBLIC COMMENTS

There were no additional public comments.

8. ADJOURNMENT

**THERE BEING NO FURTHER BUSINESS TO COME BEFORE THE COMMISSION, THE CHAIR DECLARED
THE MEETING ADJOURNED AT 8:06 P.M.**

GADSDEN COUNTY, FLORIDA

REGINA DAVIS, CHAIR - PLANNING COMMISSION

ATTEST:

BERYL H. WOOD, DEPUTY CLERK