

**TOWN OF HARRISBURG, NORTH CAROLINA
HARRISBURG TOWN HALL
BOARD OF ADJUSTMENT MEETING
TUESDAY, APRIL 17TH, 2018
6:00 PM**

MINUTES

1.

CALL TO ORDER

Lloyd Quay called the meeting to order.

PRESENT: Lloyd Quay, Thelma Thorne-Chapman, John Overcash, Andy Rathke, Rodney Garner, Steve Bedwell

ABSENT: Scott Noel

2.

CONSENT AGENDA

3.

PUBLIC HEARINGS

H2018-01-(CUP) Pharrs Mill Telecommunications Tower Conditional Use Permit Request. Jonathan L. Yates has submitted an application for a Conditional Use Permit (CUP) for a wireless telecommunications tower to be located at 3430 NC HWY 49 S (PIN# 55172878950000). The property is currently zoned B-1, Neighborhood Business District. All those speaking concerning this case were sworn in. Joshua Watkins, Planning Director, presented the background information.

Josh Watkins

This application H2018-01-(CUP) for the Pharrs Mill Telecommunication tower, Mr. Jonathan Yates has submitted a conditional use permit application for a wireless telecommunications tower to be located at 3430 NC HWY 49 South. The property is currently zoned B-1 which is the Neighborhood Business District. Table 4.6-1 lists this use of telecommunications tower as a conditional use with supplemental regulations from Article 5 of the UDO. What we are going to do is talk about what those supplemental regulations are that pertain to this particular use. If you have any questions as we go through this please ask me. Antennas and towers may be considered either a principle or accessory structure on a property. Currently this particular parcel has no uses on it at this time so this would be establishing a principle use on the property. Also, lot size must be considered this parcel is 2.98 acres in size. Number 3, applicants for an antenna or tower shall provide to the administrator an inventory of existing towers in the area I will point you to exhibit 2 in your packet which is a letter and Exhibit 12 is going to show the active sites in Cabarrus County for the proposed operator so they have provided this information to us. Number 4, there are several items that must be considered relating to aesthetics. One of the requirements is that the tower shall maintain a galvanized steel finish or be painted a neutral color in Exhibit 1 there is a note stating that it will be a galvanized finish so they have met that requirement. Also there is

a screening requirement which on Exhibit 1 on the site plan they are adequately screening we evaluated the buffering plan they have provided and it is adequate per the requirements of the ordinance. Another issue that the ordinance speaks to is lighting they have issued a letter from the Federal Aviation Administration in Exhibit 13 stating that no illumination is going to be required for this particular tower. It is a 175 foot monopole tower but the letter from the FAA shows that they will not be requiring illumination for this tower. So then we get into the fall zone this is one of the issues I wanted to point out I stated earlier this is a 175 foot monopole tower that is being proposed, the fall zone is proposed to be 69 feet. If you look in your packet under Exhibit 3 there is a sealed letter from a professional engineer stating that the design of the monopole has been designed in such a way that it will collapse into that 69 foot fall zone. Because honestly it sounds a little strange 175 foot tall how can it only fall within that 69 foot fall zone that letter from the professional engineer goes a little bit into how it has been engineered to do just that. Another requirement for the telecommunications request is to provide a preliminary major site plan which has been provided and is shown in Exhibit 1 of your packet. Number 12, the setback distance between the proposed tower and the nearest residential unit and residentially zoned property so there are two numbers here. The first one being the distance between the tower and the nearest residential unit the nearest residential unit is 910 feet away as measured from the Cabarrus County GIS website. The nearest residentially zoned property is going to be 70 feet and if you look on the map above this area here is zoned residential so if you measure that out its about 70 feet from that tower to this zoned area. I did not include an aerial photograph of this but if you are familiar with this area, this is the pond that is associated with the reception facility just west of the property so this residentially zoned area actually correlates to that large pond adjacent to the property. One of the other requirements that has to be shown in the application is a separation from the nearest cellphone tower or telecommunications tower, as you will see in the packet Exhibit 1 page C note 9 the nearest tower is going to be 4.3 miles from the proposed site here. Another issue that I wanted to point out was that one of the requirements that the ordinance has is that there needs to be a statement about compliance with the FCC's radio frequency exposure standards, they have included a letter in exhibit 6, Emissions Compliance Report that indicates that the request is compliant with the RF Exposure Standards. There is a requirement for the site to be fenced for security purposes, page C-4 in exhibit 1 does show the required fencing and the minimum height is 6 foot treated lumber to provide that security feature. The site is primarily wooded there is a small area here that has been cleared in the past. Staff does have a recommendation if this is approved that the existing vegetation that is on the site be used to the fullest extent possible rather than having to plant new trees to meet that requirement we would rather see the existing vegetation be used because a lot of it is already at a mature state to provide addition screening and buffering to the property owner to the west.

Lloyd Quay

Josh do you know how far from the circle, which is the location of the pole, is from Highway 49?

Josh Watkins

From here to Highway 49 is going to be 86 feet.

Lloyd Quay

That's to the right-of-way of 49?

Josh Watkins

Yes.

Lloyd Quay

Ok. I guess that was the primary location because of the flood plain and the pond being there?

Josh Watkins

Yes, there is a smaller pond on this site and then the line you see here indicates the 100 year flood zone on the rear of the property so there are some challenges with the existing site, this being one of the areas that is actually raised out of that flood plain away from the pond with fairly easy access to HWY 49 S.

Lloyd Quay

Ok I can see the 86 feet now and the fall zone was 70 something feet right?

Josh Watkins

69 feet.

Andy Rathke

So the fall zone is 69 feet and you said the residential zoned property was 70 feet right?

Josh Watkins

Correct.

Lloyd Quay

Thank you.

Josh Watkins

So if you have any specific questions I'll be glad to answer those at this time but I did want to point out that the application and all the requirements that were needed to be met per staff, all the information has been provided and has been found to be in compliance with the requirements of the UDO.

Lloyd Quay

Thank you Josh.

Thelma Thorne-Chapman

The next tower is 4.5 miles from this property?

Josh Watkins

Yes.

Thelma Thorne-Chapman

What is the distance usually?

Josh Watkins

That's a good question and that may be a question the applicant can speak better to.

Lloyd Quay

Is there any more questions for Josh at this point in time?

Rodney Garner

The residential zoned property that is 70 feet away, what is on that property now?

Josh Watkins

The adjacent property is all one parcel here, it's actually split zoned so it's not two parcels it's just two different zonings on the same tract of land so what currently exists right here in this area shown as B-1 is a reception facility they rent their building for weddings, events, things like that. With the water feature here the pond is sort of a back drop for photos and things of that nature. So the closest residential structure is going to be over here on Kings Drive as I measured it off of GIS the closest home was 910 feet.

Andy Rathke

How far is the building itself, the reception building, away?

Josh Watkins

I do not have that measurement.

Steve Bedwell

That was my question also, that's the closest building to the tower itself?

Josh Watkins

Potentially so there is also a building to the east located over here there is an auto sales lot with a building there. I can pull it up on the aerial photo, I do believe that this is going to be the closest building but I cannot say that being 100% certain.

Andy Rathke

So we do not know what the distance is?

Steve Bedwell

Well based on your measurements that you have here, you're talking 86 feet to the highway that distance to the building on the map to the north is far more, two or three times that. But the one we do need to know to the south is the reception building. I mean it is not on this map so it's at least some fair distance away I would suppose. Did the applicant take measurements on all the buildings?

Josh Watkins

If there are no more questions for me we can send it over to them if you would like. I will still be here for questions.

Lloyd Quay

We can hear from the applicant now whoever is speaking for them. Please state your name and address.

Frank Longest Jr.

Mr. Chairman my name is Frank Longest. I am an attorney in Burlington, NC. Our firm is serving as North Carolina Council to the applicant, obviously this is a quasi-judicial hearing, I am here for that purpose in case there was a need for North Carolina Council to make appearance of record with regard to the business at hand, so the members of the Board Of Adjustment my job is fairly simple. I'm afraid I hear the voices above being my doctor reminding me that I'm missing my recreational work that I'm supposed to do tonight so here I am visiting you and he's telling me I have got to straighten up tomorrow morning. Now with regard to what we are here for tonight, my job is easy without any opposition and with the staff making a favorable recommendation I just wanted to point out to you that the cell phone industry is obviously growing. We all know how we are tied into the use of cell phones. My children, wife, and other senior citizens use a cell phone all the time so the wireless community is something we have in our everyday life. Because of this it's almost a necessity to provide a structure for the growth of cell phones, so part of this tonight is to increase the infrastructure in this area for the future use for all of us that use a wireless community. I would like to introduce to you Jonathan Yates, an attorney from Charleston SC. Jonathan prepared the application and is obviously more aware of all the input into it so he can answer all of the questions that you may have he also has boards here that I think can be helpful but I need to let you know Jonathan is what we call the guru of location of sites. He has literally done hundreds of them if not a great deal more than that to my knowledge over the years he does it over the south east and every once in a while he will find one that goes somewhere else as a nice venue to visit. So tonight I would like to introduce my friend Jonathan Yates.

Lloyd Quay

Mr. Yates, name and address please.

Jonathan Yates

Yes sir, my name is Jonathan Yates and my address is 105 Broad Street Charleston, SC. I'm glad to be before you tonight, I thank Frank for the nice introduction. Before I go one step forward, as Frank said I do this around the south east what I rarely encounter is what I encountered in the Town of Harrisburg, the professionalism, friendliness, of Josh Watkins. You would think it goes without saying that you have a planning director that helps everyone you have that not everyone has that. I have to admit since this is my first tower in Harrisburg I wore him out with a couple of stupid questions over the phone at least he never laughed at me. Josh has been a pleasure to work with and we don't always encounter that. What's for us tonight is a proposed facility Verizon has a problem. Quite simply when Verizon has a problem they have what we call a coverage hole or drop call area. Quite simply the closest tower is about 4.3 miles away and I have with me my client and friend George Davis. The admission that George and his team were given, to brag a

little bit on George his team at TowerCom, they handle the specialty towers for Verizon Wireless. They handle the ones that take a little more site acquisition services, the ones that require a little more due diligent and this was the case. George was given the assignment of solving this problem for Verizon. After a diligence search, he came up with what we feel was a location that absolutely works for their network and he came up with one that absolutely makes all the requirements of Section 5.21, the Wireless Telecommunication Services Section of the UDO. What we have in this case is a slightly less than 3 acre parcel its owned by Peter Gueli he owns 2 more properties just up the road about 1 acre a piece all total about 5 acres there. All three of those properties are zoned B-1 and we were able to secure a lease with him. We then went to work on the provisions of the Ordinance. You have our wireless facility site the facility itself is what we call a monopole design. What a monopole is it's just a pylon. What you see in front of a Hardees or Walmart but instead of their sign we have communication equipment. In this case we are at 175 feet that is very important. One thing and I am going to get George to show you, we had the proposed facility reviewed and approved by the FAA. We submitted it at the required 175 feet and the FAA made two very important findings. First, they determined that there was no hazard air navigation, secondarily they determined that it would not require air navigation lighting. Thank you. So what we are placing on this property we have a 3 acre property George has leased approximately 75 feet by 75 feet we will place the monopole inside of our compound which is 60 feet by 60 and surrounded by a 6 foot wooden fence. What I want to make clear about this facility it is ordered by Verizon, Verizon has need but it is designed for at least three of their competitors as well when they want to solve any problems that they have in that area. There is space on the tower and there is space on the ground for all of their ground equipment. The purpose is, what are we trying to do? We are trying to provide wireless infrastructure. If you drive down 49 today, either side you have a lot of infrastructure going on you got power lines, telephone lines, and the NC railroad down the side what this is designed to do is to provide wireless infrastructure. We liked the site it was exactly where Verizon needed it to be. We were able to place the facility trying to bring it up a little closer to the road we knew right next to us was the event facility, we wanted to get out of their view, we had some tree cover to the side there but we were able to place the facility about 86 feet off of 49, 362 to the rear across the pond and then 250 up to the north and 70 to the south. Let's talk about the fall zone. In your ordinance we are required to be set back the fall zone from any property line. This is again the monopole design. We had it reviewed by North Carolina professional Engineer Robert Beacom and he made a couple important findings. What Mr. Beacom found was he designed it to a wind speed of 90 mph with no ice and 30 mph with 3/4" radial ice, that is the standard requirement for Cabarrus County under the ANSI/TIA-222-G standard. In addition, the tower was designed so in a catastrophic event it would have a fall radius of less than 69 feet. As you can see in Mr. Beacom's discussion he will tell you that even at a catastrophic event the worst that can happen is that a portion of the monopole above leaning over and remaining in a permanently deformed condition. Without breaking your microphone let me show you what happens here. In an extreme event, what the pole is designed to do at the top 69 feet, it just deforms over and it has to be replaced. What we do just to be safe, we certify the radius around there. What I would like to look at next if its ok to the board if we could we are going to talk about the factors provided in your ordinance. This is all under 521.62 the first factor we are 175 feet we have a 4 foot lightning rod for a total of 179. Proximity of the tower to residential structures, Josh has already shown you that we are about 910 feet from the closest residential structure. Nature of the uses on the adjacent and nearby properties we are vacant to the north, to

the south we have HWY 49 and the North Carolina railroad system and vacant behind that to the east of us we have a used car facility, we have a car repair facility, lawn mower repair shop, and to the west of us we have an event facility and some residential across the lake. Next question is surrounding topography, we are relatively flat around there, and we are only about 4.4 miles from Rocky River so pretty flat. Surrounding tree cover as you saw the edge of this property some of this has been cleared in the middle but along the perimeter we have a nice tree cover mixed of hardwood and pine. Design of the tower we go with the monopole design monopole is the most expensive design but it's the cleanest and the thinnest silhouette. It has a galvanized finish the galvanized finish is very important, it dulls up very quickly, it does not have any glare and is non reflective and the most important this tower will not have lights. If this tower was in place say an hour from now, no one would see it because it would be dark outside. So those are the factors that we went with. We came in at a height that the FAA would approve it without the air navigation lighting. We are going to come directly off of 49, we have had it reviewed by NCDOT final approval is not there yet but it was been reviewed. The availability of the existing towers, the closest tower is about 22,456 feet away, about 4.3 miles. For any conditional use permit, I want to look at some of your general requirements. Number 1, we enhance the public health, safety, and general welfare by providing in that area effective access to 911 first responders. I do not have the data from Cabarrus County and I apologize, but in my home town of Charleston, SC 82% average monthly calls to our 911 dispatch come from a wireless device. Why because when you're in a mess you pull it off your hip verses having to go borrow a phone. Next question are we properly located with respect to transportation facilities, water supply, fire and police protection, waste disposal we need no public services whatsoever other than fire and police protection I have been doing this many years and we have never had one catch on fire. Will we violate the character of the area no quite frankly the difference we are infrastructure, we are necessary infrastructure, and we enhance the character of the area. When a facility like this goes in, it takes about 45 days for George and his crew to get it up. After that, Verizon only visits about half a dozen times for about an hour, usually a guy in a light truck just checking to tinker on the equipment. What we provide is the infrastructure that those around it can use to be equivalent for those around the county, state and the rest of the country that already has this structure. Finally, we must comply with the general plans for the physical development for the town as embodied in the ordinance. We have gone through and Josh helping me go through it. Section 5.21 Wireless Telecommunication Services Unified Development Ordinance and I believe we meet each and every one of those ordinances. Sorry for the long winded hello but I am here to answer any questions and so is my team.

Lloyd Quay

Thank you Mr. Yates, I think still the question that was hanging at the end from Mr. Bedwell was just knowing the distance from the event center.

Josh Watkins

I may be able to speak to that. Andrew actually went back and did some measurements approximately of course because of using aerial photography. Approximate location from the site of the proposed monopole to the building to the west which is the reception building was 240 feet and the auto sales to the east was 305 feet from the site of the monopole.

Steve Bedwell

That pretty much clears that up and I guess the only other question that I would have is, I guess it is designed for a fall zone of 69 feet and that's where you are saying that basically they would bend over. They don't break or snap off?

Jonathan Yates

Think of our monopole like a straw, you bend it, hard to break but you can bend it and permanently deform it over. That's what happens with a monopole. Towers come in a lot of different flavors growing up what I saw everywhere was the big guy wires going everywhere and then we had what we call the laddis of the cell support, the monopoles are the most expensive, the most visual pleasing and the safest from a wind design stand point. That again is the certification that North Carolina engineer Robert Beacom made and if you look behind you the bigger circle around the tower is where he put in the circle radius. But again what it is designed to do is to deform over, we have to replace the top section, but as a safety we keep a secure area of 69 feet around it either way.

Lloyd Quay

I guess people are sitting thinking of it making one of these things like that and I've looked at some of the footing requirements and just the way the pole itself is designed and the wind loading that would have to be generated on that it, it would be highly improbable for it to fail as far as just flopping over.

Jonathan Yates

For it to fail as a Christmas tree the wind loading would have to be as such that there would be nothing left in that area. The railroad would be gone, there would be used cars going the whole way through a 3 county radius but the wind load that could take it down like a Christmas tree would take down the whole county.

Lloyd Quay

There's not a sail there it's just a big steel pole.

Jonathan Yates

Exactly.

Lloyd Quay

Ok, are there any other questions for Mr. Yates?

Rodney Garner

The history of the monopole do you have any other information where it has ever toppled over more than 69 feet that you know of?

Jonathan Yates

I have not encountered that and that's why we get the fall zone certification. I am not a professional engineer so we get a professional North Carolina engineer to certify it and to design it so it behaves that way in a catastrophic condition. I am always concerned about catastrophic wind because I live in Charleston SC and we seem to get flooded every fall we get water and

wind so it's very important to me. That's why Mr. Beacom makes that call and he puts his North Carolina Seal on the document. Anything can happen whatever man builds the tower can do whatever he wants to it. What we are looking at Mr. Beacom certifies that and we know sort of the history on monopoles.

Andy Rathke

Mr. Yates what is the normal height of a tower? You say this one is 175 feet, is that the standard?

Jonathan Yates

No it's kind of all over the place. I am sort of an old man in this business, as you can tell looking at me I am not young, I started this in 95 working on the first networks in the Carolinas. Originally a lot of that I was doing was around 300 feet, particularly on highways. As we got closer into towns a lot of ordinances were trying to get us to 200 feet because everything knew that the FAA would not have the lights on it under 200. So in this kind of setting on a busy highway 49, I was actually surprised when I saw this, I thought it would come out around 195 feet so George and his team were able to get it lower still has the room for Verizon at the lower height and still the space for their 3 competitors. You get into an urban area and they could be even smaller because they are just trying to cover a couple block radius. This tower has some work to do because Verizon has what they call a coverage area defect and a dropped call area so it's trying to solve that problem.

Andy Rathke

The one that is 4.3 miles away is that a Verizon tower too?

Jonathan Yates

We are uncertain it is a monster in terms of height.

Andy Rathke

So if there is one 4.3 miles away what causes them to have drop calls? Especially if the one up the road is a lot higher.

George Davis

My name is George Davis my address is 5611 NC HWY 55, Durham, NC. Thank you for hearing our case tonight and we appreciate your time. To answer your question there is no standard height. It is all based on 3D engineering based on what these frequencies that the carriers Verizon and their competitors buy from the FCC through auction. As Jonathan said this site they wanted to be up toward 200 feet but given the proximity to some other structures we wanted to be a little bit shorter if we could because we figured it was a better fit for your community and area. The sites that are on either side I do not have the height on them but we do not own them and I don't believe Verizon owns them, there is a lot of different tower owners in our industry, some private and some public and probably and Jonathan can jump in if he disagrees but I would say probably a good 70 percent or better are owned by a company like mine or one of the other large companies. Those sites vary in height the reason why you need a height like we are saying is obviously Harrisburg has grown a lot over the last 20 years. You look at the pictures around here of Town Hall and what used to be here and the way it looks now is unrecognizable to someone who has lived here for a long time. These sites are like sponges,

they can only hold so much volume at any given time. The same way your utilities director has to increase the size of sewer pipes or widen roads, it is the same exact way with this infrastructure. The only difference between those and ours is we are private. So in order to make the site on the West side of Harrisburg that is carrying all the traffic right now, and the one to the North that we are showing on the maps that were provided those sites the sectors that are pointing towards Harrisburg the one point East, West, and South, they are blocking at a rate that is too high for Verizon to tolerate, too high for their customers to tolerate. So what might happen at 5pm is you're going to make a call and you can't make the call or you're going to download something and you think your back on the days of dial up. This is going to improve the coverage area but it's primarily a capacity fix. In other areas of Charlotte, and even your own county, you will have towers anywhere from a mile to two miles apart. That is the progression of this industry. More capacity, faster data speed, they need more towers, more antennas closer together whether that's a tower, a roof top, water tank it all depends on what's there. In this case it's a tower because there was no other structure that was tall enough to fill the hole. The other component of why the tower was the height it was designed at, it's because it has to communicate and connect with the site that is fitting in with the network. If you are in an area that is starting over that would be one thing, but when you are trying to basically plug holes or links in a chain they have to connect with the sites that are already there and are existing. The heights of those sites and antennas and where they are broadcasting at in order for this network to work right this antenna needed to be at technically 170 feet because they do not go above the top of the tower because then they would become a lightning rod. The antennas are centered at 170 and go right up to 175 at the top of our structure. Probably more information you were looking for your answer but that's why they are designed at the height they are. I have sites that are east of North Carolina that are 300 feet tall I have a site out on the coast that is 120 feet tall I have a site right at the gates of Carowinds that is 195 feet, so this is consistent with what is being built in the area in terms of height, type of structure, location and the fact that it's a monopole.

Lloyd Quay

Any other questions for Mr. Davis?

Rodney Garner

Mr. Davis you said that the first one is 4.3 and the other one you said is pretty much 4.3 in the opposite direction correct?

George Davis

Here is the coverage maps that are in your packages. There are a few different maps attached. If you look at the first one it shows you the coverage area giving you areas that are yellow that's area because of trees, buildings or things the coverage because they are only at a certain height can only get to so many places. So as you can see there is quite a big hole there between the sites. When we look at the next page not only do we fill that hole in completely but you also have additional capacity, that's the thing you can't see. This is going to provide better coverage but it is going to split the work that those sites are doing to allow more people to use the network at any given time. That's the thing I think people have a hard time understanding. It's the same thing that if everyone would turn their water on at the same time, the water pressure is going to be terrible and needs to be improved.

Thelma Thorne-Chapman

You will be providing assistance for the present need as well as the future.

George Davis

Yes so this site is designed not only for Verizon today but for the future. It actually in this case they even have more than that. The other carriers we put what we call a loading scenario like fake antennas so it's designed in for four carries and we have relationships with all those carriers. We work and actually build sites with T-Mobile right now we are working with Sprint and AT&T. So we have been marketing this site and T-Mobile is very interested in this location because similar to Verizon they are on the same towers that Verizon is on and they are having the same problems they are so when they looked at this site they said it was the perfect spot for them but it is just not in their budget yet. I would expect that it would be in their budget by later this year or next year now that they know that it is in the plan, so if the board approves the project tonight we will let them know and I'm sure they will be very happy and they can turn that pencil into ink. As we move towards 5G, right now we are in 4G 5G is more antennas, signal, faster data speed so if you think of 1,000 times faster it's the same thing with 5G. What it's going to mean is you're going to see more towers I don't have any more planned here, I don't know what Verizon has planned for the rest of the county but I would bet that you would see Mr. Yates in the future if not myself. It's because the demand is created by people like yourself and citizens here in Harrisburg. These decisions are not taken lightly; these are expensive and very timely projects. We have been working on this project for over a year before we got to you tonight and they don't go into it half way I can tell you from experience this site, this ring, this area and problem has been passed around and worked at least three different times before we were able to find a site that the town liked and the landlord liked that we could get designed in a way that would meet the requirements of Harrisburg and also the needs of Verizon. We are very happy that we have found that spot and we would like to get your approval tonight to proceed on that force and serve the citizens in Harrisburg and people passing through. If you have any other questions I'll be glad to answer for you.

Lloyd Quay

Thank you Mr. Davis, is there any more questions for Mr. Davis or Mr. Yates? Mr. Yates did you have anything additional you would like to add?

Jonathan Yates

Really nothing additional, we feel like we have found a good site and it solves the problems for Verizon.

Rodney Garner

With the tower that you said, maintenance will be coming out to maintain the tower but at the same time updates as you said we will be working on 4G now but you will have 5G, 6G and 7G coming down the line so these towers will be updated with technology to accommodate the different G's as we come into the future.

George Davis

Yes sir. So a G for anyone that does not know is short for a generation. We are in the 4 generation of wireless communication. The towers as I mentioned they are very structurally found with lots of future concertation built into it so that it is viable for my client and their future needs and the other carriers and pretty much whatever they can think and need to put on it. When you talk about the next G, the next 5G or upgrade, generally that involves adding additional radios beyond the antennas. One thing that you saw when from 3G to 4G is that all the equipment was on the ground there still is equipment on the ground but a lot of the equipment has been moved up the tower. Now you have the signal source right behind the signal outlet being the antenna. So those they call remote radio units were something that occurred in the last 10 years and it really changed the structural needs of the towers. This being a new tower we have all that built in and seeing other towers have failed structurally or had to be upgraded, they can do upgrades to this type of tower, which is why we chose this, it is the most slim design that you can have because its only 2 ½ to 3 foot wide once you get up above the trees there is things they can do to enhance it on the outside but we are talking about years down the road because whatever someone wants to throw at that site for the next 5 to 10 years plus we have it built in there. Typically our carriers put 6 antennas to start sometimes 3, sometimes more every site we are building including this one we are putting a minimum of 12 antennas that are larger than what they typically use, heavier than what they typically use and more lines. Used to be that everything was an inch and 5/8 now they are using, basically it's like a power cable end, it looks like the power cable coming from your cable box. They are much smaller and lighter weight but we still have the larger ones just to put that much more extra capacity in there so that if someone comes along and says TowerCom built that tower but we need a new one because that one won't hold our stuff. We don't want that to ever happen first we don't want to lose the business and second we don't want them to come before your board saying they need to put another tower right in that same area. Our whole company's mission is to build shared use infrastructure so we put a lot thought and care into not only where we put it but how we build it.

Frank Longest Jr.

Mr. Chairman my last duty is to ask that the application, those that you have in your books, be introduced as part of the applicant's record and we ask that that be submitted as part of the record for this hearing.

Lloyd Quay

Thank you sir. Anymore questions? I am fixing to close the public hearing but I noticed that some gentlemen came in afterwards if you have to ask any questions or anything like that you have to be sworn in. If you don't want to do that, that is fine but I just wanted to make sure. With that being said is there any more questions for anybody regarding this matter right now? Ok, I am calling the public hearing closed. Now time for board deliberation. Is there any discussion that needs to happen now or further items that need to be discussed at this time? I need a motion then.

Andy Rathke

I'll make a motion that we approve H2018-01-(CUP) Pharrs Mill Telecommunications Tower Conditional Use Permit Request.

Thelma Thorne-Chapman

Second.

Lloyd Quay

Ok thank you Andy with a second from Thelma. Is there any further discussion from the board?
If not all in favor raise your right hand all opposed same.

VOTE:

Passed 5-0

Lloyd Quay

Ok petition has passed.

Rich Koch

Mr. Chairman would you like for me to prepare the appropriate Findings of Fact and Granting Order?

Lloyd Quay

Yes I would, please. Is there any other business before the board?

4.

ADJOURNMENT

There being no further business, Steve Bedwell made a motion to adjourn with a second from John Overcash .**The motion passed 5-0.**

Findings of Facts as prepared by Attorney Rich Koch are as follows:

FINDINGS OF FACT

1. This an application for a conditional use permit for a telecommunications tower for wireless service.
2. The property owner is Pete Gueli and the property address is 3430 N.C. Highway 49 S, Concord, North Carolina.
3. The property is 2.98 acres in size and is presently zoned I-1 (Light Industrial).
4. The applicant is Jonathan L. Yates, in behalf of TowerCom/Verizon Wireless.
5. The applicant submitted a completed application. The public hearing notices were published, the neighbors were notified by mail and a sign was placed on the property, all as required by the Town of Harrisburg Unified Development Ordinance (“UDO”).
6. Since the property is undeveloped, locating a telecommunications tower on the property is a principal use for the property.

7. An inventory of existing telecommunications sites has been provided to the Town.
8. The proposed tower shall have a galvanized finish.
9. The fence surrounding the ground level equipment shall be opaque, from 6-8 feet tall and constructed of treated lumber fastened with hot dipped galvanized steel screws.
10. The applicant has obtained a determination of no hazard to air navigation from the FAA and the tower is not required to be illuminated.
11. The applicant has submitted documentation evidencing compliance with all state and federal requirements for a telecommunications tower.
12. The applicant has submitted a structural analysis letter sealed by a professional engineer.
13. The proposed tower has been designed so that the fall zone for the tower is 69 feet, despite the fact that the tower will be 175 feet tall.
14. The fall zone distance has been certified by a professional engineer and will be entirely contained on the property.
15. This tower application has been processed as a telecommunications facility, not as an essential service, public utility or private utility.
16. The proposed site plan and signage meet the requirements of the UDO.
17. According to the site plan, the nearest residentially zoned property is 70 feet from the proposed tower and the nearest residence is 910 feet away.
18. It appears from the documentation submitted with the application that there is no availability of effective cell service for the proposed coverage area on existing towers or structures or through alternative technology.
19. The nearest tower registered with the FCC to the proposed site is 4.3 miles away.
20. The applicant has submitted evidence that it is willing to co-locate other users on its proposed tower.
21. The applicant has submitted an RF Emissions Compliance Report indicating that the proposed tower is compliant with the RF exposure standards.
22. The proposed ingress and egress to the tower site has been reviewed by NCDOT for final approval.
23. The applicant has agreed that as a condition of approval, the applicant will use the

existing vegetation on the property and supplement it as required to meet the landscaping requirements of the UDO.

24. The surrounding property uses are a reception facility, single family residential, automobile sales, automobile repair, small engine repair, a state highway, the North Carolina Railroad and vacant land.

25. This proposed use is not detrimental to the public health, safety or general welfare in that the applicant has provided documentation to show no adverse impact and in fact this use will provide additional wireless coverage available to emergency responders and law enforcement.

26. The proposed use requires no public services other than emergency, fire and police protection.

27. The proposed user will not violate neighborhood character nor adversely affect surrounding land uses as the monopole design is relatively unobtrusive, will not be lighted and will provide additional wireless service to the area.

28. The proposed use complies with the general plans for the physical development of the Town as it complies with all of the requirements for a telecommunications tower in the UDO.

Based on the foregoing Findings of Fact, the Board makes the following

CONCLUSIONS OF LAW

1. The foregoing Findings of Fact are incorporated by reference as Conclusions of Law to the extent necessary to give effect to the provisions of the Granting Order.

2. The proposed telecommunications tower will not be detrimental to the public health, safety or general welfare.

3. The proposed telecommunications tower is appropriately located with respect to transportation facilities, water supply, fire and police protection, waste disposal and other public facilities.

4. The proposed telecommunications tower will not violate neighborhood character nor adversely affect surrounding land uses.

5. The proposed telecommunications tower will comply with the general plans for the physical development of the Town.

Lloyd Quay, Chairman

Carly Bedgood, Secretary