UPPER MERION TOWNSHIP BOARD OF SUPERVISORS
ZONING WORKSHOP MEETING
APRIL 9, 2015

The Board of Supervisors of Upper Merion Township met for a Zoning Workshop meeting on Thursday, April 9, 2015 in the Township Building. The meeting was called to order at 5:00 p.m., followed by a pledge of allegiance.

ROLL CALL:

Supervisors present were: Greg Waks, Greg Philips, Bill Jenaway, and Carole Kenney (arrived late). Also present were: Dave Kraynik, Township Manager; Joseph McGrory, Township Solicitor, Rob Loeper, Township Planner; Scott Greenly, Associate Planner; Chris Schubert. Supervisor Spott was absent.

CHAIRMAN'S COMMENTS:

Chairman Philips announced an executive session was not held prior to this meeting. He also expressed appreciation to the township staff who were involved in meeting the logistical needs of the Gaming Commission yesterday and preparing Freedom Hall for the hearing that was held on April 8th.

DISCUSSIONS:

DAS (DISTRIBUTED ANTENNA SYSTEM)

Mr. Joe McGrory, Township Solicitor, introduced Chris Schubert, Esq., who is well known expert throughout the Commonwealth in the communication industry's telecommunication industry. Mr. Schubert is proposing some Verizon DAS throughout the township, and has agreed to assist the township in drafting an ordinance in order to come up with the best product.

Mr. Rob Loeper, Township Planner, stated a draft ordinance is in process which covers not only DAS but the whole wireless area. He said Mr. Schubert is working with a group preparing a model ordinance which will be presented at PSATS.

Mr. Schubert stated a company called ExteNet Systems is a DAS provider developing DAS networks and working in conjunction with Verizon Wireless to propose a DAS network for Upper Merion Township. He said these discussions are timely in order to obtain insight on the township's thinking in terms of the telecommunications ordinance, especially in view of the changes which have occurred within the past five years. The industry has found because of the increased growing demand of people using not only cell phones and various

other wireless devices a lot of the existing cell tower sites have grown to a point of exhaustion and a strain has been placed on the existing infrastructure in terms of the ability to provide high speed internet access and access to the telephone network. The various providers (Verizon, AT&T, Sprint, T-Mobile, etc.) are all proposing additional site locations but they do not need the big macro-sites. It is very difficult to get cell towers approved in a residential area and a lot of these areas have fallen short in terms of capacity coverage. What is needed now is for targeted smaller coverage areas utilizing small cell or DAS to supplement or offload coverage problems.

Utilizing the aerial, Mr. Schubert provided some examples of a DAS node which was described as having one antenna placed at the top of an existing light pole. The equipment running the antenna is located at the base of the light pole. There could also be a situation where a small fiber glass pole approximately 30 feet high would be placed on a small concrete pad on a parking lot island surrounded by landscaping.

Ordinances adopted over the years never contemplated small cell technologies such as DAS.

Mr. Schubert explained smaller cell technology DAS sites are essentially cites operating as a connected network utilizing existing or new fiber cables that run from node to node. The node would be connected with another light pole possibly a couple of blocks down the road and then connected by fiber optic cable with a series of poles that would be connected to one another. There might be anywhere from 11 to 150 nodes that are all interconnected. These poles are ultimately connected to a bay station or a master telephone switch at some other location which ultimately gets the signal out to the telephone pole or to the internet. The DAS is designed to supplement or to expand a footprint of coverage from the existing macro site.

Mr. Schubert noted DAS antennas called “cantennas” (because they look like big coffee cans) would be placed on top of a telephone poll throughout a residential community or up and down a street in a commercial area. The equipment running the antenna is located about one-third of the way up on the telephone poll.

Mr. McGrory asked if these could be placed at the base on the ground. Mr. Schubert responded in the affirmative. He said typically they are hanging off the pole because they are not disturbing anything on the ground and it is not necessary to secure easement or property rights. Mr. Kraynik noted it would be less prone to vandalism.

Mr. Philips noted for the record that Mrs. Kenney arrived at this point in the presentation.

Mr. Philips asked for more discussion about fiber optics. Mr. Schubert responded with fiber if it is an existing node Peco owns there will be power lines running off of that. Comcast might have its own cable running off the telephone poll. It was noted Verizon already has existing fiber cable in the area they are proposing for a DAS extension.

An unidentified member of the group said there are already some cantenna units on telephone polls and asked if they are being used by Verizon. Mr. Schubert responded he does not know where they are located or who would be in control of those and would be interested to know.

A question was asked as to what happens if all providers want to do this and if there is a finite amount of real estate. Mr. Schubert responded ExteNet is a company specializing in DAS and development of DAS networks and is licensed with the Commonwealth of Pennsylvania as a public utility company and known as a mutual host provider. In order to obtain the license they have to make their antenna system available for anybody who wants to use it. The DAS antenna is capable to receiving various signals from different providers.

Mr. McGrory asked Mr. Schubert if there are any specific antennas that are proposed in the wireless community or if they are all provided through the entity he represents. Mr. Schubert responded currently it is all through the entity he represents. He said ExteNet has developed a vast network for providers and they would “piggyback” off of that and utilize all the same existing notes and pair up with the existing infrastructure.

Mr. Philips asked if everyone using the same antenna would slow down traffic on a network. Mr. Schubert responded DAS extends the footprint of an existing bay station and as long as providers are all connected through the DAS network to their bay stations all the cantenna is doing is collecting and transmitting radio signals and feeding it down the fiber optic cable to the bay station and it is just a matter of extending a pipeline to the tower.

Mr. Philips asked for clarification if the DAS would be hard wired and if it would go underground. Mr. Schubert responded it could be underground if there are existing conduits under the road as there are in a neighboring county’s historic district. All they had to do is run the fiber through without having to rip up any road.

Mr. Philips commented in Upper Merion Township where there is a lot of pole to pole if it is correct that we would still be using the aerial system and not adding wires. Mr. Schubert responded in the affirmative.

Mr. Philips asked if Mr. Schubert would be proposing to put the DAS underground. Mr. Schubert responded in the negative.

Mr. Waks asked if that is something that could be done. Mr. Schubert explained since cabling is in place at this point in time they would not spend the money to reroute underground.

Mr. Kraynik commented he used to work in a neighborhood where everything is underground. Mr. Schubert responded if it is all underground it would go underground. He said if there are no poles they have to get the antennas up in the air and would have to utilize street lights.

Mr. Philips hypothesized if a car would take out the street light who would replace it. Mr. Schubert responded in the case of a city in Pennsylvania it was decided to enter into a maintenance agreement with ExteNet who had the responsibility of maintaining and the obligation would fall on ExteNet.

Referring to the aerial, Mr. Philips asked for additional clarification about the cantenna process for the pole in the photograph and if the base clips onto the existing pole or if the pole was totally replaced because the base comes with a unit. Mr. Schubert responded that particular pole was replaced since it was designed as a stealth facility. The alternative would have been to hang some equipment off of the light pole similar to the equipment in the other photograph and then just put up the cantenna. Since the pole was in a historic district they wanted something more aesthetic and ExteNet had to go before their Art Commission for design approval.

Mr. McGrory indicated he mentioned to Mr. Schubert there are certain streets in Upper Merion Township where it is proposed to have streetscaping and in those particular streets an overlay of the ordinance can be done to maintain the aesthetic value of certain streets.

Mr. Waks asked if a pole can be replaced in that situation. Mr. Schubert responded it would be necessary to replace a pole with a new designed pole.

Mr. Jenaway asked if nodes would go site to site or be hard wired. Mr. Schubert responded they would have to be hard wired. He said it has to be fiber in order to assure the band width for the big pipeline.

Mr. Jenaway noted most of Upper Merion's poles are wooden poles and some have transformers hanging off of them and asked for clarification about what happens in that case. Mr. Schubert responded if it is a Peco pole or Verizon pole they would determine where the antenna could be placed. Typically it would be placed at the top. Sometimes the provider would say because of the level of power running on top of the pole it could not go there and would direct that the equipment be placed farther down the pole.

Mr. Jenaway asked about adding two more devices onto a pole that already has the cross members and a transformer and is already leaning at a 45

degree angle. Mr. Schubert responded a structural review would be done on the pole and they would try and find another pole in the line that does not have a big transformer and other loading. While there is some flexibility there is not a lot of flexibility because these are very low power antennas. Macrosites put out 200 watts of power for an antenna and these are putting out 5 watts and as a result are covering about an 800 foot radius circle around an antenna and are specifically designed not to have a lot of broad coverage. It is a targeted operation to offload from big sites and target areas that were either historically difficult to get wireless coverage to residential areas or areas that have greater population concentrations.

Mr. Jenaway noted with a pipeline there are certain points where there is so much product moving through at certain points that the pressure has to be reduced. Mr. Schubert responded the fiber ultimately ties back to one of the main switches where there is about 9 miles of fiber optic cable that has more than sufficient capacity. It would not be necessary to add any more or put in a bigger pipeline.

Mr. Jenaway commented at some point in time there is a maximum capacity that can go on there. Mr. Schubert responded he imagines there would be but there would not be a need to add another parallel fiber at this point.

Mr. Waks asked if any specific traffic lights or poles have been chosen. Mr. Schubert responded he provided the Township Planner with a listing of locations which include 25 existing telephone poles and one street or traffic light.

Mr. Schubert provided a map of the areas of the township which have been identified as lacking in LTE coverage and would be included in phase one.

Mr. McGrory pointed out the whole township through various providers are going to want this and is the reason for the proposed ordinance. He noted the citizen boards will have input and it is hoped a proposed ordinance will be completed within 60 to 90 days.

Mr. Philips asked if this could be used as the genesis of a municipal Wi-Fi system. Mr. Schubert responded it would depend on the frequency of the Wi-Fi set up.

An unidentified member of the group asked who would be the provider of Wi-Fi. Mr. Schubert responded that would be another issue and was not sure how that would work.

A discussion followed about the pros and cons of a municipal Wi-Fi system.

An unidentified member of the group indicated one thing that would be needed in the ordinance is that ExteNet would have to be neutral in the event a certain provider were to purchase them and ExteNet would still be required to make the system available to anyone who wanted to use it.

Mr. McGrory indicated he welcomed the input of the Media Communications Advisory Board on the proposed ordinance which is still a working document.

Mr. Waks suggested forming a small group from the Media Board to include one of the supervisors to review and comment on the proposed ordinance and get it done as soon as possible.

Mr. Waks stated he would like to see photos of every telephone pole and/or traffic light which is proposed for the DAS as well as a rendering of what they would look like. Mr. Schubert responded he would be able to pull up the street views in Google and will do a proposed simulation of what the DAS would look like.

Mr. McGrory pointed out the ordinance would involve more than just this type of DAS system and it would be a comprehensive ordinance.

Mr. Jenaway asked if there are any downsides to DAS and asked what kind of complaints there have been in other places. Mr. Schubert responded with an example of an approach taken by another DAS company that backfired because they proceeded without the benefit of public hearing or public involvement. He suggested the ordinance should have a requirement that the applicant has to mail out notices to the public if they are going to be making one of these installations.

Mr. Schubert stated the business model for ExteNet is they are going to wait until they have a provider who will partner with them to help with a coverage problem or upcoming problem with capacity. Once the partnership is established ExteNet would design a DAS network that would work to cover that area.

Mr. McGrory asked if Mr. Schubert would have the ordinance outside or inside the zoning. Mr. Schubert indicated that would be up to the Township Solicitor. Mr. McGrory expressed concern about future preemption of the PUC. Mr. Schubert responded that is a good point because the franchise ordinance is outside zoning as a stand-alone and trying to integrate it to the zoning ordinance could be problematic. Mr. McGrory stated he would want the benefit of enforcement of zoning. Mr. Schubert responded if a separate penalty enforcement provision is desired and also additional protection if it is not integrated in zoning he could see it work as a stand-alone. Mr. McGrory asked what most do in this situation. Mr. Schubert responded this is so new he is aware of one municipality that has not codified it as yet into their ordinance, but

were considering placing it in zoning. Mr. McGrory noted it would have to be a right-of-way ordinance. Mr. Schubert agreed.

Mrs. Kenney asked who pays for all of these improvements. Mr. Schubert responded the applicant would pay the cost of doing the infrastructure and in this instance it would be ExteNet.

Mr. Waks asked if data is available indicating that signal strength is weaker in certain portions of Upper Merion Township. Mr. Schubert responded he would get that information.

Mr. Waks asked if Mr. Schubert could bring supporting data which would show greater signal strength post installation of this DAS system. Mr. Schubert indicated that is shown on the color-coded map.

Mr. Waks stated showing pre and post installation evidence and discussion at the hearing would be very compelling. Mr. McGrory said the township would indicate this would help signal strength throughout the entire township by making this type of system township-wide. He pointed out the ordinance would not just focus on this project.

Mr. McGrory asked about emergency services and if the DAS would tie into that communication network. Mr. Schubert responded in the affirmative. He said that is going to be the next wave of technology. Right now there is LTE and the next wave to roll out is called Voice Over LTE.

A member of the group noted this system would have to be compatible with the county system.

STREETSCAPE

Mr. Loeper indicated he had done some research into streetscape ordinances and streetscape ordinances have great disparities depending on where they are located. As an example, Boston has an extensive 298 page guideline on streetscape which would not work in Upper Merion. The question is how far do we want to take this. Staff has begun to analyze some of Upper Merion's streets to determine where streetscape could be applied or not and also looked at the actual sidewalk environment. Questions to be considered are minimum or maximum use of sidewalks, do we control materials, and what about lighting.

Mr. McGrory mentioned a lot of the lighting is provided through grant money.

Mr. Loeper indicated greeenscape requirements would also have to be considered for such things as street trees and if there should be variations from

what is currently required in the subdivision ordinance for such things as planters or any type of decorative fences or walls.

Mr. McGrory commented this would depend on which street is being discussed. Mr. Loeper pointed out this is why it gets into so many design variables. In areas where there is commercial activity other questions arise as to whether or not to have benches, waste receptacles, bike racks, public art, water features, drinking fountains. The question is at what point do we want to encourage or mandate certain amenities or leave it up to a private developer. With regard to special features such as bus and transit shelters, currently that is contracted out and the township does not have a lot of control. Another question would be if people would like to see sidewalk cafes, and if so, what kind of design standards.

Most of the township's roads have very significant gaps in terms of sidewalks and it might be more appropriate to concentrate efforts on places such as parks and schools that generate pedestrian activity.

Mr. McGrory pointed out the streetscape ordinance has been targeted to certain corridors. The US 202 streetscape will be different than residential streetscaping or First Avenue streetscape and needs to be looked at corridor by corridor and what is to be accomplished for those corridors.

Mr. Jenaway asked if there are any suburban communities elsewhere where they might have two or three approaches for main arterial roads versus residential streets. Mr. Loeper responded staff has not gotten that far as yet as the initial focus is on "easy hanging fruit." The next step is to look at other communities and see what they did.

Mr. Philips commented he would like to see prioritization of heavy traffic areas. Mr. Loeper responded staff has not as yet put in any transit routes because that would be another element of the ordinance. He said the ordinance that was handed out had some basic elements with some basic design standards but not so much for streetscape. Consideration will also be given to such things as smart street elements which would have internet access for pedestrian oriented streets, smart tags, quick response bar codes for emergency calls, air quality, noise, and real time information for traffic.

Mr. Loeper stated in moving forward it would be well to have enhanced natural stormwater management in the building of sidewalks and streetscapes.

Mr. Philips suggested categorizing some of the high volume streets and what can be done on those and take it street by street. He noted the BID has some ideas that could be incorporated. With regard to such things as trash receptacles, the question remains who picks up the trash.

Mr. Waks commented it is a lot easier to make changes to areas when you are dealing with one person who is buying five or six properties or what the BID has done working with some of the commercial real estate owners to fix an entire corridor such as what will happen on First Avenue with the road diet. On an individual property by property basis it is more difficult. It might be possible to target specific areas in the case of redevelopment.

Mr. Loeper said another approach might be to not only take a look at a whole corridor since there are areas of a corridor that change at a certain point, but maybe subcorridors.

Mr. Waks commented on an area in Maryland where the sidewalks have gone from concrete to brick in certain places which is part of a redevelopment and is aesthetically pleasing.

Mr. Loeper stated one city in his research took an interesting approach in looking at sidewalks and parking lots and came up with a plan allowing a property owner to possibly reduce some impervious and some required parking in order to install some green amenities. That might be another approach for some areas of the township. Mr. Loeper pointed out it is not desirable to create a situation whereby some kind of relief because of parking or something else would be necessary. It would have to be a win-win for both parties.

Mr. McGrory suggested identifying what is reasonable for a developer to install and maintain and what would be obtained by public grant.

Mr. Philips asked if there are any areas of the township such as Allendale Road or Keebler Road where a more holistic look could be taken with development or redevelopment such as what was done when the Art Museum was built.

A discussion followed about a certain area on Allendale Road that would benefit by the installation of sidewalks for a sidewalk connection.

Mr. Loeper said what he is hearing is there will be different approaches to different areas and there is no common solution.

Mr. Jenaway asked when this will be discussed with the planning commission. Mr. Loeper responded it would be discussed in about two weeks. He said he did not know how interested the Pennsylvania Horticultural Society would be.

Mr. Waks suggested follow up be made with regard to Allendale Road.

Mr. Loeper asked the Township Solicitor if the township can force a property owner to close a gap in a sidewalk. Mr. McGrory responded townships do have the power to do that; however, they rarely do it. Sometimes a grant is obtained and they put it in at their cost.

Mrs. Kenney commented in that instance the homeowner would be responsible for maintenance. Mr. McGrory said if the township installs the sidewalk, the homeowner has to maintain.

Mr. Philips stated he would like to see something a bit bolder than what we have now. Mr. Loeper said he believes this would go in subdivision. Mr. McGrory responded in the affirmative and said it should not go in zoning.

Mr. McGrory commented it is necessary to adhere to the purpose of the Second Class Township which is primarily charged to take care of roads and protect the public interest. It is questionable as to whether aesthetics is within the township's jurisdiction which is why he insists that it not be in zoning and that it be in the SALDO because at least it would be waivable.

Mr. Philips suggested talking with the Assistant Township Manager about putting in for a sidewalk grant for the Allendale segment being discussed. The other alternative would be for the township to install the sidewalk at the township's cost and assess the property owner.

ADJOURNMENT:

Without further comment from the Board and public, it was moved by Mr. Jenaway, seconded by Mrs. Kenney, all voting "Aye" to adjourn the zoning workshop meeting. None opposed. Adjournment occurred at 6:45 p.m.

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DAVID G. KRAYNIK
SECRETARY-TREASURER/
TOWNSHIP MANAGER

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Minutes Approved:
Minutes Entered: