

ZONING HEARING BOARD OF UPPER MERION TOWNSHIP

MONTGOMERY COUNTY, PENNSYLVANIA

APPLICATION OF EXTENET SYSTEMS, INC.

APPLICATION NO. 2017-16

PROPERTY: 450 Keebler Road

DECISION

ExteNet Systems, Inc. (“Landowner”) requests a use variance to permit a distributed antenna system (“DAS”) node¹ facility (the “Facility”) in the R-2 Single-Family Residential District where the use is not permitted. Landowner has entered into a Utility Licensing Agreement with the Upper Merion Area School District, under which it may install and maintain the Facility at 450 Keebler Road (the “Property”), which also contains the Upper Merion Area Middle School (the “Middle School”). The Facility is one of 26 nodes being installed by Landowner in Upper Merion Township, as part of an upgrade to Verizon’s wireless telecommunications system in the Township.

On July 19, 2017, the Zoning Hearing Board of Upper Merion Township (“ZHB”) held a public hearing on Landowner’s application. Four ZHB members were present at the hearing: Mark S. DePillis, Esquire, Chairman; M Jonathan Garzillo, Vice-Chairman; Maria Mengel, Secretary; and John M. Tallman, Jr., Member. Michael E. Peters, Esquire, of Eastburn and Gray, P.C. represented the ZHB as its solicitor. Landowner was

¹ A node is a component of telecommunications equipment that sends and receives data, consisting of an antenna and associated equipment housed in a cabinet.

represented by Christopher H. Schubert, Esquire, of Riley Riper Hollin & Colagreco. Four residents² appeared in opposition to the application, unrepresented by counsel.

The hearing was duly advertised, notice was given in accordance with the requirements of the Upper Merion Township Zoning Ordinance of 1942, as Amended (“Zoning Ordinance”), and the proceedings were stenographically recorded. In support of its application, Landowner relied on the Third Circuit Court of Appeals’ decision in *APT Pittsburgh Limited Partnership v. Penn Township Butler County of Pennsylvania*, 196 F.3d 469 (3d Cir. 1999).

After careful consideration of the evidence presented, the ZHB makes the following findings of fact and conclusions of law:

A. FINDINGS OF FACT

BACKGROUND

1. Landowner holds a license to install the Facility on the Property pursuant to a Utility Licensing Agreement with the Upper Merion Area School District, approved by resolution of the Upper Merion Area School District’s Board of School Directors dated May 15, 2017. [Ex. A-9; Ex. A-10.]

2. The Facility is part of a 26-node DAS network in the Township. [N.T. p. 7.] Twenty-four of the nodes are already installed and in operation. [N.T. pp. 7-8.]

3. Landowner’s 26-node DAS network will serve Verizon. [N.T. p. 12.]

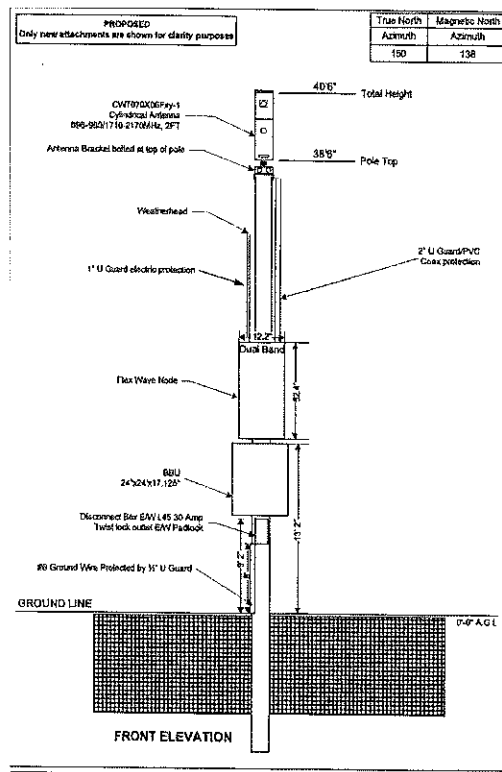
ZHB HEARING

4. Landowner entered the following exhibits:

² Objecting residents were: Ted Quillen, 513 Keebler Road; Peter Radice, 438 Springhouse Road; Christopher Geosits, 415 Springhouse Road; and Daniel Rooney, 448 Springhouse Road.

- a. A-1: ZHB application
- b. A-2: aerial photograph of Property
- c. A-3: street view photograph of Property from Keebler Road
- d. A-4: aerial photograph titled "Map of KOP DAS node locations"
- e. A-5: photograph titled "Typical DAS node components"
- f. A-6: photo-simulation of proposed DAS node
- g. A-7: plan set prepared by Precision Valley Communications, dated April 18, 2017, 4 sheets:
 - (i) sheet T1: Title Sheet
 - (ii) sheet S1: Site Plan & Pole Elevations
 - (iii) sheet E1: Typical Wood Pole Detail
 - (iv) sheet E2: Attachments
- h. A-8: deed dated August 14, 1958, between The Candlebrook Company and The School District of Upper Merion Township, recorded with the Recorder of Deeds of Montgomery County in deed book 2898, page no. 383
- i. A-9: resolution of the Board of Directors of Upper Merion Area School District, approving Utility Licensing Agreement with ExteNet Systems, Inc., dated May 15, 2017
- j. A-10: Utility Licensing Agreement between Upper Merion School District and ExteNet Systems, Inc. dated May 15, 2017
- k. A-11: *curriculum vitae* of Marlon Depaz, Wireless Telecommunications Radio Frequency Engineer
- l. A-12: Federal Communications Commission, Radio Station Authorization for Licensee Cellco Partnership, d/b/a Verizon Wireless
- m. A-13: RF propagation map titled "KOP without node 09 700 Mhz"
- n. A-14: RF propagation map titled "KOP with node 009 700 Mhz"

- o. A-15: report titled "Declaration of Site MPE Compliance", prepared by ExteNet Systems, Inc., dated October 21, 2015
 - p. A-16: report of Kenneth R. Foster, PhD, P.E., regarding radiofrequency electromagnetic energy, dated November 16, 2016
 - q. A-17: FAA TOWAIR Determination Results
5. Licensee presented two witnesses:
- a. Rick Angelini, Licensee's Director of Engineering and Implementation
 - b. Marlon Depaz, Licensee's Radiofrequency Engineer.
6. Licensee's testimony was as follows:
- a. The Facility would consist of a cylindrical antenna, the node itself, a back-up battery unit, and related equipment – all attached to a monopole:



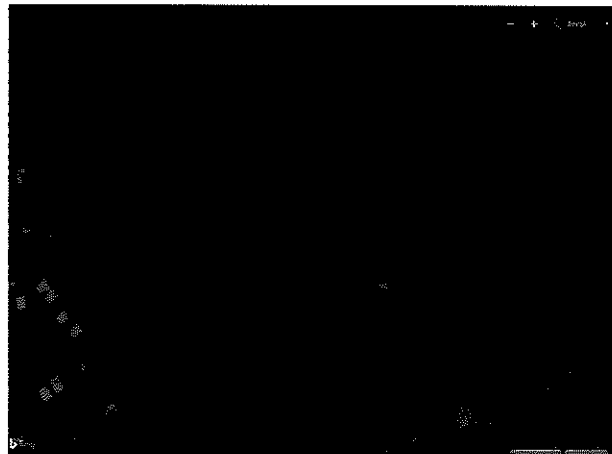
[Ex. A-7; N.T. pp. 28-29.]

- b. The total height of the Facility would be 40' 6" to the top of the antenna. [Ex. A-7.]
- c. Licensee investigated the feasibility of several alternative locations, without success:
 - (i) PECO denied Licensee's pole attachment application to install the Facility on an existing PECO utility pole within the right-of-way bordering the Property. [N.T. pp. 15-16.]
 - (ii) PECO denied Licensee's request to install the Facility on a "mid-span" pole between two existing PECO poles, within the right-of-way. [N.T. p. 17.]
 - (iii) Installation of the Facility in Volpe Park, across Keebler Road from the Property, would require at least two poles and significant excavation for the telecommunications cable and electricity. [N.T. p. 16.]
 - (iv) Installation of the Facility on an existing light pole in the Middle School's parking lot would similarly require significant excavation for the telecommunications cable and electricity. [N.T. pp. 20-21.]
- d. Ultimately, Licensee selected the proposed location, which is near existing utility/light poles:



[Ex. A-7.]

- e. Telecommunications cable and electricity are readily available in this location, due to the Facility's proximity to existing utilities. [N.T. pp. 18-19.]
- f. Licensee performed a propagation study, demonstrating a gap in Verizon's wireless service coverage in the area of the Property:



[Ex. A-13; N.T. pp. 44-50.]

- g. The Facility fills that gap and will provide additional coverage in the Middle School building:



[Ex. A-14; N.T. pp. 33-34; 50-52.]

- h. Licensee's Radiofrequency Engineer, Mr. Depaz, explained the effect of this gap in coverages as follows:

LICENSEE'S ATTORNEY: And is there a concern with regard to the possible number of subscribers that would be adversely affected if this gap was to be maintained in that way?

MR. DEPAZ: Yeah, definitely. By not having a node there you're placing all the data and all of the traffic to go onto the other nodes, which would overload those nodes. So it's very specific to where those nodes are.

Usually we pick in front of locations that we know are going to be heavy usage, like a building or a school or something like that.

[N.T. p. 48.]

- i. Mr. Depaz further explained what would occur without the node:

MR. DEPAZ: ... certain areas in the school will have very little to no good quality coverage, which would not allow you to make phone calls if they need to.

[N.T. pp. 49-50.]

- j. The Facility complies with the FCC’s electromagnetic emission requirements, operating at less than 0.2 percent of allowable limits. [N.T. pp. 56-57; Ex. A-13.]
- 7. Two residents testified in support of the application: Donald Penner, 444 Keebler Road and Sean Ferrier, 509 General Knox Road.
 - a. Mr. Penner, owner of the property closest to the Facility had no concerns regarding negative effects on health or property values. [N.T. p. 67.]
 - b. Mr. Ferrier testified to the cellular phone signal difficulties he experiences on his property. [N.T. pp. 67-69.]
- 8. Four residents spoke in opposition to the application: Ted Quillen, 513 Keebler Road; Peter Radice, 438 Springhouse Road; Christopher Geosits, 415 Springhouse Road; and Daniel Rooney, 448 Springhouse Road. Objecting residents’ concerns were limited to unspecific and unsubstantiated concerns of (1) health and (2) property values. [N.T. pp. 72-93.]

B. DISCUSSION—ZONING VARIANCE

In support of its application, Licensee relied on section 332 of the Telecommunications Act of 1996, 47 U.S.C. § 332(c)(7), which provides that local governments may not “prohibit or have the effect of prohibiting the provision of personal wireless services.” 47 U.S.C. § 332(c)(7)(B)(i)(II).

The interplay between the Telecommunications Act and local zoning regulations was at issue before the Third Circuit Court of Appeals in *APT Pittsburgh Limited*

Partnership v. Penn Township, 196 F.3d 469, 480 (3d Cir. 1999). In *APT*, the Third Circuit established an analytical framework for evaluating entitlement to a zoning variance under the theory that the denial of a requested variance would have the “effect of prohibiting” telecommunication services, in violation of the Telecommunications Act. That analytical framework consists of a two-pronged inquiry.

Under the first prong, the applicant must show that the proposed facility “will fill an existing significant gap” in wireless services. *Id.* at 480. Determining whether a gap in service is significant involves at least two sub questions. *Am. Cellular Network Co., LLC v. Upper Dublin Twp.*, 203 F. Supp. 2d 383, 389 (E.D. Pa. 2002). The first is a qualitative one: has the provider established that the quality of service is sufficiently poor so as to rise to the level of a “significant” gap? *Id.* The second question relates to the scope of the gap: has the provider established that the purported gap in service affects a large enough number of users so as to constitute a “significant” gap? *Id.*

The second prong requires the applicant to show that the manner proposed to fill the significant gap in service is “the least intrusive means” for closing that gap. *APT Pittsburgh*, 196 F.3d at 480. An applicant is not required to show that every potential alternative, no matter how speculative, is unavailable. *Sprint Spectrum, L.P. v. Zoning Bd. of Adjustment of the Borough of Paramus N.J.*, 606 F. App'x 669, 677 (3d Cir. 2015). Rather, the proper inquiry is whether a “good faith effort” was made by the provider to identify and evaluate less intrusive alternatives. *Id.* For example, did the provider consider “less sensitive sites, alternative systems designs, alternative tower designs, placement of antennae on existing structures, etc.”? *APT Pittsburgh*, 196 F.3d at 480.

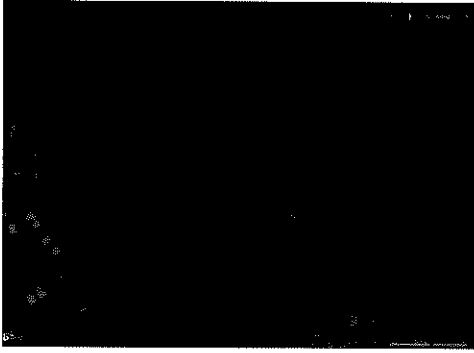
Where a provider demonstrates both a significant gap in service and that the proposed facility is the least intrusive way of filling that gap, a zoning hearing board may not deny necessary zoning relief to construct the proposed facility.

In *Zoning Board of Adjustment of the Borough of Paramus, supra*, an application for zoning relief to construct a monopole was denied on the basis that the applicant “failed to investigate less intrusive ways of providing coverage” and “did not put forth a good faith effort to explore and investigate alternative technology to provide coverage.” On appeal, the Third Circuit reversed, finding that the zoning board of adjustment’s decision constituted an “effective prohibition” under the Telecommunications Act. Specifically, the court found that the applicant had demonstrated a good faith effort to consider less intrusive ways of providing coverage and had rejected those alternatives for valid reasons. The applicant’s expert witnesses had testified that the alternative system raised at the hearing, a distributed antenna system, was not a feasible solution because it was more susceptible to outages, less flexible, less able to cover multiple carriers, and designed to cover a smaller service gap than required. The court reasoned that this testimony demonstrated that the applicant had performed a good faith effort to identify and evaluate less intrusive alternatives, and that applicant did not have to prove the infeasibility of every possible alternative.

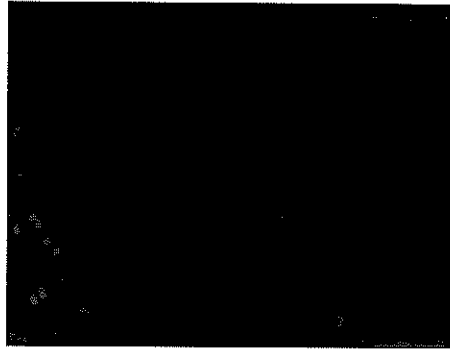
Licensee met both prongs of the *APT* test.

1. **APT Prong #1: Licensee demonstrated the Facility will fill an existing significant gap in communications coverage.**

By comparing RF propagations, Licensee demonstrated that the Facility would fill an existing significant gap in communications coverage:



[Ex. A-13, without Facility]



[Ex. A-14, with Facility]

The propagations speak for themselves. The gap in coverage is particularly noticeable when viewed as part of Licensee's 26-node DAS network. Within that DAS network, the Facility will serve a residential neighborhood, Volpe Park, and the Middle School.

Licensee's radiofrequency engineer explained that without the Facility other node facilities within the DAS network will be adversely affected and "overloaded" by data that would otherwise be handled by the Facility. [N.T. p. 48.] Moreover, without the Facility, the Middle School would have "little to no good quality coverage, which would not allow you to make phone calls." [N.T. pp. 49-50.]

Based on this uncontroverted testimony, Licensee demonstrated a significant gap in coverage, in terms of both quality of coverage and quantity of users affected.

2. APT Prong #2: Licensee demonstrated that the Facility is the least intrusive.

Licensee explained in detail its efforts to identify and propose the least intrusive facility. The system chosen by Licensee is limited in height to 40' 6". The Facility will be installed on a monopole and blends in with the existing utility/light poles in the area:



[Ex. A-7.] The Facility will be served by existing telecommunications cable and electricity in the location.

There are limited potential locations for the Facility, due to the presence of two particularly large properties within the coverage gap, consisting of the Middle School property and Volpe Park. Licensee explained that it could not locate the Facility within the right-of-way due to the presence of PECO utility lines. [N.T. pp. 15-17; 20-21.] Location across the street in Volpe Park or on a light pole in the Middle School parking lot would require significant excavation of the road or parking lot for the telecommunications/electricity lines. [N.T. pp. 16, 20-21.]

Licensee demonstrated that it gave careful consideration to placement of its Facility by identifying and considering alternative locations which were infeasible. Those objecting to the Facility offered no alternative sites that Licensee should have considered.

Given the foregoing, Licensee selected the least intrusive type of facility and location for the Facility.

C. CONCLUSIONS OF LAW

1. Licensee has standing to seek the requested variances as licensee to a site license agreement with the legal owner of the Property.

2. The ZHB has jurisdiction under section 909.1(a)(5) of the MPC, 53 P.S. §10909.1(a)(5), and Zoning Ordinance section 165-251.A(5) to grant variances from the provisions of the Zoning Ordinance.

3. The ZHB is obligated to ensure compliance with the Zoning Ordinance.

4. Section 332 of the Telecommunications Act of 1996, 47 U.S.C. § 332(c)(7), provides that local governments may not “prohibit or have the effect of prohibiting the provision of personal wireless services.” 47 U.S.C. § 332(c)(7)(B)(i)(II).

5. *APT Pittsburgh Limited Partnership v. Penn Township*, 196 F.3d 469, 480 (3d Cir. 1999) establishes a 2-prong test: the proposed communications facility must (1) fill an existing significant gap in service and (2) be the least intrusive means for filling that gap.

6. If an applicant for zoning relief meets the *APT* test, a zoning hearing board cannot deny the requested zoning relief.

7. The ZHB determines that Licensee demonstrated that the proposed Facility meets both prongs of the *APT* test.

8. The Licensee proved its entitlement to the requested variance.

At its July 19, 2017 hearing, the ZHB voted to approve the application and the next day mailed the following notice of decision:

AND NOW this 19th day of July 2017, the Upper Merion Township Zoning Hearing Board GRANTS a variance from section 165-295(A) *Where permitted* to permit a distributed antenna system node facility with a total height (to top of antenna) of 40' 6". The relief granted was conditioned as follows:

The distributed antenna system node facility shall conform strictly to the representations, testimony, and exhibits presented at the hearing and set forth in the application, including, but not limited to, the plan set prepared by Precision Valley Communications, dated April 18, 2017, admitted into evidence as exhibit A-7 and attached hereto, consisting of the following 4 sheets:

- sheet T1: Title Sheet
- Sheet S1: Site Plan & Pole Elevations
- Sheet E1: Typical Wood Pole Detail
- Sheet E2: Attachments

Because this application was contested, a decision with findings of fact, conclusions of law and reasons will follow.


**ZONING HEARING BOARD OF
UPPER MERION TOWNSHIP**



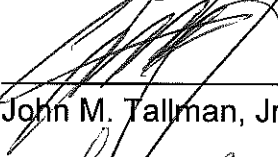
Mark S. DePillis, Esquire, Chairman



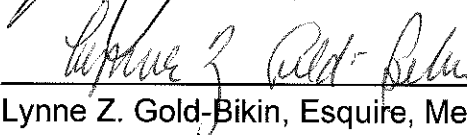
M Jonathan Garzillo, Vice Chairman



Maria Mengel, Secretary



John M. Tallman, Jr., Member



Lynne Z. Gold-Bikin, Esquire, Member

Date of Mailing:

Attachments: plan set prepared by Precision Valley Communications, dated April 18, 2017, admitted into evidence as exhibit A-7 and attached hereto, consisting of the following 4 sheets:

- sheet T1: Title Sheet
- Sheet S1: Site Plan & Pole Elevations
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