

DEERFIELD PLANNING BOARD  
DEERFIELD, NEW HAMPSHIRE  
DECEMBER 11, 2013

MINUTES OF MEETING

PRESENT: Board members Fred McGarry, Kate Hartnett, Alan O'Neal, Lisa Wolford, Peter Schibbelhute. Also present Planning Consultant Gerald Coogan and secretary Jane Boucher.

Chair Fred McGarry called the meeting to order at 7:05PM.

REQUEST FOR LOG MERGER

A request for a Lot Merger was received from Sharon M. Godlewski and Melissa A. Zych for Lots 40 and 38 on Map 419. The property is located on Middle Road, Deerfield, NH. Kate Hartnett questioned if she should recuse herself, as she resided on the property prior to selling it. Board members felt that would not be necessary. Peter Schibbelhute moved to approve the request for a Lot Merger. Alan O'Neal seconded. Voted in favor.

APPROVAL OF MANIFEST

Alan O'Neal moved to approve the manifest in the amount of \$6,285.00 and time sheets for Jane Boucher. (\$6,000.00 to correct invoice approved on 11/20 in the amount of \$6,150) Upton & Hatfield \$285.05; time sheets 20 hours and 17 hours. Peter Schibbelhute seconded. Voted in favor.

PROPOSED AMENDMENTS TO ZONING

Chair McGarry advised that the last day to post and publish notice for a first public hearing on proposed zoning amendments is December 27, 2013; the last day to hold a first public hearing is January 7, 2014; the last day for the Planning Board to hold a final public hearing is January 21, 2014.

Mr. McGarry said that we could hold one public hearing and no changes could be made.

Gerald Coogan noted that it is the expectation of NH Housing for something regarding the Village District to appear on the ballot.

Lisa Wolford questioned what we do if we are not happy with the ordinance.

Both Alan O'Neal and Kate Hartnett agreed. Kate Hartnett noted that we really have not done any outreach to residents.

Lisa Wolford referred to an e-mail from James Raymond. "Pleasant Lake Watershed Ordinance. Your draft showed only minor changes to the Ordinance. We have in the past raised

questions about this ordinance, which these proposed changes do not address. Ms. Wolford felt that the proposed amendments should not be included until more work can be done.

Chair McGarry will speak with Attorney Raymond and the Board will discuss proposed amendments further on December 18.

PRELIMINARY CONSULTATION; MINOR SUBDIVISION; PHILIP AND LORRAINE DAVIDSON; RIDGE ROAD  
Lorraine Davidson and Russell Davidson were present.

Mrs. Davidson commented that they would like to subdivide a three acre lot for their son to build a home and apparently there have been questions raised regarding "old Ridge Road" which they would like to use as frontage.

She referred to an e-mail from Gerald Coogan noting that:  
. The 1939 warrant was posted as "discontinuing" Ridge Road and two others subject to "gates and bars"  
. The minutes from the 1939 Town Meeting listed the warrant article as "discontinuing" Ridge Road.  
. The selectmen, in 1991, voted to lay out the westerly end of Ridge Road, west of Thurston Pond Road, but the apparently never recorded the layout.  
. The minutes of the Town Meeting made no mention of amending the posted warrant article to change the wording to drop "subject to gates and bars." Based on this information, it would appear it would be necessary to meet with the Board of Selectmen.

Chair McGarry provided copies of the Town Warrant (1939) which stated "To see if the town will vote to discontinue subject to gates and bars and a copy of the minutes stating that Ridge was "discontinued". He noted that there was a discrepancy between the minutes and the warrant article.

Chair McGarry advised Mrs. Davidson to meet with the Board of Selectmen to determine the status of the road. He also noted that perhaps they could consider a "Smith Ordinance" road to apply for a subdivision.

Kate Hartnett questioned the status of the road. Mr. Davidson said that some work will have to be done, but he felt it could be used to access a home.

7:45 CONTINUATION; PUBLIC HEARING; SITE PLAN REVIEW; VERIZON WIRELESS; SOUTH ROAD  
Attorney John Weaver, Daniel Briggs, Kevin Briggs, Bradley Briggs and several abutters were present.

Chair McGarry noted that balloon tests were done at the site on

November 22 and November 23, 2013.

Attorney Weaver provided revised plans noting that there have been a few minor revisions.

Attorney Weaver introduced several people also present: George Estant, Bob White, Dan Goulet, J.F. Hugo, Mr. Vsuk.

Attorney Weaver noted that Verizon does comply with FCC Regulations. He added that the Board has 150 days from the date of submission to act on the application. Attorney Weaver said that the application was submitted on November 1, 2013 and March 30, 2014 was 150 days. According to Attorney Weaver, RSA 676:4 states that the Board has 65 days to act on the application which was accepted on November 20, 2013 bringing that date to January 24, 2014.

Attorney Weaver commented that requirements outlined in the Ordinance 329.5 Construction Performance Requirements and 329.6 Conditional Use Permits which he will address.

Attorney Weaver provided a map showing where there is limited service in Deerfield and why Verizon chose the location after determining gaps in coverage.

Kate Hartnett referred to the definition of "Broadband" "A descriptive term for the revolving digital technology that provide consumers with a single switch facility that offers intergrated access to voice, high speed data service and interactive delivery."

Attorney Weaver provided plans depicting why Verizon selected this particular property. Once gaps have been prioritized, search rings are established. Based on this information, properties are looked for within those areas.

Dan Goulet, C Squared Systems, provided information on the RF Report. He provided maps showing current coverage and improved coverage.

Mr. Goulet noted that after a great deal of research they determined that this is the best location to give the best service.

Mr. Goulet stated that they did look at four other sites.  
.30 Raymond Road ( existing AT&T tower)  
.31 Old Candia Road  
.94 South Road  
.459 High St.

He explained why these sites were not selected by reviewing each of four maps provided.

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Lisa Wolford noted that one of the requirements is that the applicant must submit information showing that coverage provided by a cell tower is necessary and if it is not necessary to our area the Board does not have to approve it.

Lisa Wolford questioned what the added coverage will be. Mr. Goulet replied 8%.

Robert Haag an abutter questioned coverage. Mr. Goulet replied there is no Verizon 750 4g coverage.

Jon Thurber, an abutter, noted that he has no problem with 3 g service.

Janet Samuels, an abutter, said she has no problem with service. She asked what will happen when there is 5 g coverage. Mr. Goulet replied that right now there is no 5 g and he cannot answer the question.

Janet Samuels questioned interference to her existing land line. She referred to a document from the Office of Energy and Planning stating that there will be levels of interference.

Mr. Goulet said no.

Don Piro, an abutter, questioned if this proposal for a single tower. Attorney Weaver replied it is for a single tower.

Attorney Weaver addressed the layout of the proposal noting that we are looking at a 50 foot x 50 foot compound with a 150 foot monopole within it and approximately 12 foot x 26 foot shelter.

Todd ,Construction Manager, explained that clearing will be done and power and utilities brought in. Concrete will be brought in, foundation laid and steel brought in. It will take approximately 30 days to complete. The housing will house a generator and a/c unit.

Kate Hartnett questioned the air conditioning unit. Attorney Weaver replied that they had contacted Doug Sheadel who has provided a response to Environmental Sound. A copy of Mr. Sheadel's letter is attached to these minutes. Attorney Weaver referred to the letter noting that " The results of the study indicate that the sound from the proposed wall mount HVAC unit will produce 26 DBA or less at the nearest residences"

Chair McGarry questioned the size of the generator. Attorney Weaver replied 50 kw.

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Attorney Weaver addressed a request from Board member Kate Hartnett requesting full cut off lighting and he said that has been addressed.

Attorney Weaver also noted that Board member Lisa Wolford had questioned tree heights, which will be addressed , and qualifying pictures of other sites which he provided.

Lisa Wolford referred to 329.5 Camouflaging in our ordinance. She asked if there was a way to require that not all trees will be removed.

Attorney Weaver said that they had no objection as long as the landowner does not have any objections.

Ms. Wolford said that there should be something indicated on the plan that ensures that not all trees will be removed.

Attorney Weaver said that they will work with the landowner to determine what trees will remain and that will be indicated on the plan.

Attorney Weaver addressed Section 329.5 and 329.6. A copy of that information is attached to these minutes.

Attorney Weaver provided photo of the balloon testing on November 22, and 23 which depicted areas which the Planning Board requested. Information was provided by Benjamin Caron.

Lisa Wolford asked if the height of the tower could be reduced to 125 feet. Attorney Weaver said that it could..

Janet Samuels asked that if it were reduced would another balloon test be required.

It was agreed that Attorney Weaver speak with Ben Caron to determine if photos that have been submitted be adjusted to reflect the change in height.

Chair McGarry will forward plans to KNA for review and comment. He noted that he is indicating the following be added to the plans

- . Cross section section on drawings
- . Detail on chain link fence
- . Limit for clearing around compound/ with language for remaining trees
- . Detail for crushed stone within compound
- . DOT/Permit for driveway
- . Detail on Lighting
- . Detail on Air conditioner/generator

Janet Samuels expressed concern regarding noise level

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s and questioned use of underground vaults. Verizon will supply data.

Lisa Wolford questioned if an independent review should also be done. In a previous e-mail Attorney Matthew Serge recommended Ivan Pagacik as radio frequency consultant. It was agreed to contact Mr. Pagacik to review information.

Janet Samuels asked what would occur if Verizon needed additional generators or air conditioning.

Chair McGarry said that any additional equipment would have to be approved and noted that the Board currently is looking only at what Verizon is proposing.

John Weaver reviewed the items to be included on the plan

- .Draft language to include landscaping
- .Detail on A/C/Generator
- .Creating simulations for modifying photos for 125 feet
- .Cross Section for gravel
- .Detail fencing
- .Detail crushed stone
- .DOT Permit
- .Detail lighting.

Janet Samuels voiced concern regarding property values. She read a letter from Judith Hampe, Broker, who addressed the effect of a cell tower for properties. A copy of the letter is attached to these minutes.

A copy of the letter along with additional information from R.G. Bramely, Real Estate Appraisers and Shepherd Associates will be sent to Avitar Associates for their comment.

Alan O'Neal moved to continue the Public Hearing for Verizon Wireless to January 8, 2014 at 7:30PM. Peter Schibbelhute seconded. Voted in favor.

The meeting was adjourned at 10:35PM.

Recorded and transcribed by Jane Boucher  
Pending Approval by the Planning Board



November 26, 2013

The Town of Deerfield, NH

RE: Environmental Sound – Personal Wireless Service Facility

Modeling Specialties has conducted an abbreviated assessment of the sound that may result from the installation of personal Wireless Service equipment at #48 South Road (the "Site") in Deerfield. The noise assessment was commissioned by Verizon Wireless, who provided their plans for the site which form the basis of this analysis.

There are two primary sources expected at the facility that will produce sound that has the potential to be heard beyond the Site boundary. Most of the proposed equipment will produce no sound such as the 150 ft monopole tower, cable tray and utility service connections. The supporting electronics will produce no sound, but are environmentally sensitive, requiring HVAC units to control the shelter environment. The sound expected from the environmental control units is based on vendor data and verified by field measurements at similar operating installations. Two units will be installed, but only one will operate at a time, allowing redundancy. The results of the study indicate that the sound from the proposed wall mount HVAC unit will produce 26 dBA or less at the nearest residences. This is well below the level that would be noticed even in a quiet rural community.

An emergency generator will also support the proposed facility. The generator will only be routinely operated for short tests of about one half hour during daytime hours. Combined with all other facility sources the generator will produce sound levels of 41 dBA or less at the nearest residences during its infrequent operation. As a point of reference, a typical car traveling down South Road produces sound well into the 50's dBA at residential setback. A truck or loud motorcycle, on the other hand, produces sound up to 70 dBA at the same distance.

The reason that a comprehensive analysis of facility sound was not requested for this site is that the equipment design and layout allows facilities like this to be sited within 100 feet of the nearest residences. Since this site is over 500 feet from the nearest residence, it will produce sound levels that have little potential to affect the community. A graphic that overviews the site and surrounding community is provided in Figure 1.

I certify that the analysis of sound levels for this project is accurate and consistent with prediction methods that are common to the acoustic analysis of such sources. I am qualified to make this statement based on training and experience in conducting analyses of environmental sounds. I am a Certified Consulting Meteorologist with more than 25 years experience conducting numerical analysis (modeling) studies in the technical areas of air quality, noise, and visual aesthetics. I am a technical expert on the noise committee of Air & Waste Management Association headquartered in Pittsburgh, Pennsylvania. I have published many refereed papers on various aspects of environmental noise. I have analyzed the sound

emissions of major industrial projects such as power plants and compressor stations, major infrastructure projects and heavy manufacturing plants. I've also conducted analyses for more than 200 wireless communication facilities on behalf of all primary carriers and various tower developers. Related to these analyses, I have testified as a technical expert before the Energy Facility Siting Boards of Massachusetts, Connecticut and Rhode Island. I have also testified before many regional and municipal approval boards in Massachusetts, Rhode Island, New Hampshire, Maine, New York, Michigan, Illinois, and California. I request that my statement for this project also be accepted for your review.

Thank you for your attention.

Respectfully,

Modeling Specialties

A handwritten signature in cursive script that reads "Douglas L. Sheadel".

Douglas L. Sheadel, CCM  
Principal





Figure 1: Aerial View of the Personal Wireless Site, Nearest Residences and Predicted Sound Levels



McLane, Graf,  
Raulerson & Middleton  
Professional Association

900 Elm Street | P.O. Box 326 | Manchester, NH 03105-0326  
Tel: 603.625.6464 | Fax: 603.625.5650 | www.mclane.com

OFFICES IN:  
MANCHESTER  
CONCORD  
PORTSMOUTH  
WOBURN, MA

JOHN F. WEAVER  
Direct Dial: (603) 628-1442  
Email: john.weaver@mclane.com

October 31, 2013

**Via UPS Next Day Delivery**  
**1Z 101 505 22 1008 3422**

Planning Board  
Town of Deerfield  
8 Raymond Road  
Deerfield, NH 03037-0159

<b>Re:</b>	<b>Application for Conditional Use Permit and Site Plan Review</b>
<b>Applicant:</b>	<b>Cellco Partnership d/b/a Verizon Wireless ("VzW")</b>
<b>Tax Map:</b>	<b>Map 423, Lot 22</b>
<b>Street Address:</b>	<b>48 South Road</b>
<b>Zone:</b>	<b>Agricultural-Residential</b>
<b>Proposed Use:</b>	<b>Commercial Wireless Telecommunication Facility</b>
<b>Ordinance:</b>	<b>Zoning Ordinance (the "Ordinance"); and Site Plan Review Regulation (the "Regulations")</b>

Dear Ladies and Gentlemen:

Pursuant to § 329.6 of the Ordinance and Article III of the Regulations, the purpose of this letter is to deliver the enclosed application for a conditional use permit and site plan review in support of VzW's proposed telecommunications facility (the "Facility") to be located at the property described above (the "Property"). This application is being delivered before the application deadline for such a submission in order to be considered by the Planning Board at its meeting scheduled for November 20, 2013.

**I. Enclosed Materials**

1. Site Plan Review Application;
2. Seventeen (17) 11" x 17" copies of the site plan (the "Site Plan") showing the proposed work;
3. Letter of Authorization and Notice of Lease;
4. List of all abutters and three (3) sets of mailing labels for abutter notifications;
5. A list of RSA 12-K:7 towns and one set of mailing labels;
6. RF affidavit, including coverage maps;

Property 1-2 times a month for maintenance purposes. No water, sewer, or other municipal services are required. The equipment will comply with all applicable FCC standards and regulations.

VzW is confident that the proposed Facility will enhance its wireless service in Deerfield, and it looks forward to continuing to provide superior wireless communications service to the businesses and residents of the community, as well as to visitors to Deerfield.

#### **IV. Conditional Use Permit Application**

Section 329 of the Ordinance governs applications for conditional use permits related to telecommunications facilities and the material and information applicants are required to submit to the Planning Board in support of proposed facilities. That section requires that applicants satisfy the construction performance requirements of Section 329.5 and the plan and submission standards of Section 329.6. VzW satisfies the relevant criteria, as explained below.

##### **1. § 329.5 – Construction Performance Requirements**

- Federal Requirements: The Facility will satisfy the relevant federal criteria, as shown in the enclosed RF affidavit, FCC licenses, and FAA TOWAIR determination.
- Building Codes/Safety Standards: VzW will comply with the review and reporting requirements in this section.
- Height: Consistent with this section, the Facility will be 150', the minimum height necessary for VzW to achieve its desired coverage. That height is well short of the maximum 175'.
- Setbacks and Separation: The Facility will satisfy the required setbacks.
- Security Fencing: The chain link fence surrounding the Facility and equipment shelter will comply with this provision.
- Landscaping: The proposed Facility will be built in the existing woods on the Property. VzW will leave this area largely intact, and it will serve as an appropriate natural landscaping, consistent with the requirements of this section.
- Camouflaging: As required by this section, VzW will attempt to blend its installation with the natural setting to the extent possible.
- Balloon Test: VzW will consult with the Board at its hearing to schedule a noticed balloon test, as required by this section.

##### **2. § 329.6 – Conditional Use Permit Application Requirements**

- Notification of Other Towns: Consistent with RSA 12-K:7, enclosed with this application are mailing labels to notify towns within 20 miles of Deerfield.

- Plan Requirements: The enclosed plans satisfy the relevant portions Sections 4.4 and 4.4.2 of the Regulations.
- Propagation Map: The coverage maps attached to the enclosed RF affidavit satisfy this requirement.
- Photographic Documentation of the Balloon Test: The upcoming photo simulations will satisfy this requirement.
- Written Proof that the Facility Complies with FCC RF Standards: The enclosed RF affidavit satisfies this requirement.
- Written Proof of NEPA Evaluation: The enclosed Environmental Site Assessment satisfies this requirement.
- FCC Licenses: VzW has enclosed the FCC licenses associated with the Facility.
- Collocation Agreement: VzW will allow other carriers to collocate on the Facility. If the Town requires an agreement stating that, please provide us with a copy that we can review.
- Further Information Requested:

*Number of sites VzW Requires:* Although VzW's nearby telecommunications facilities – which are all outside of Deerfield – are described in the RF affidavit, the needs of its wireless network change constantly as coverage and capacity issues develop and resolve. There are no current plans to install another VzW facility in Deerfield.

*Sites Outside of Deerfield Under Consideration:* As explained in the RF affidavit, the proposed tower at 459 High Street in Candia was considered, but is too distant from the southern Deerfield area where VzW has identified a gap in coverage that it seeks to address. Additionally, the ridge immediately to the south of South Road is also troublesome for coverage from northern Candia. Although northern Candia has several elevated areas, that ridge prevents potential facilities in those areas from providing sufficient coverage to southern Deerfield. A site in Deerfield is necessary to provide coverage in that area.

*Collocation of Other Carriers:* The installation of the Facility will permit other carriers to collocate on the Property, as there will be other spots on the Facility to install wireless equipment.

*Sites in Deerfield Under Consideration:* As explained in the RF affidavit, the existing tower at 30 Raymond Road was considered, but is too distant from the coverage gap to sufficiently address it. VzW also considered proposing new towers at 94 South Road and 31 Old Candia Road before deciding that the Property was the preferred option for addressing the coverage gap.

7. FCC Licenses;
8. FAA TOWAIR Determination;
9. Photo simulation (arriving under separate cover)
10. Environmental Site Assessment; and
11. One check totaling \$975.68, calculated as follows:
  - a. \$200.00 – Application fee;
  - b. \$34.40 – Square foot administrative fee (344 square feet x \$.10);
  - c. \$500.00 – Town planner review fee;
  - d. \$210.00 – Abutter notification fee, which is calculated as \$7.00 x 30 (number of abutters); and
  - e. \$31.28 - RSA 12-K:7 town notification fee, which is calculated as \$.46 x 68 (number of towns).

VzW will provide payment for the recorded documents when the Planning Board has determined what it would like recorded.

## **II. Company Information**

VzW, the result of a joint venture between Verizon Communications and Vodafone, is one of the nation's leading providers of wireless communications providing coverage in almost all of the top 100 markets in the United States. VzW has developed one of the largest and most reliable national wireless networks to provide wireless voice and data services to an ever-growing customer base, last counted at over 100 million.

VzW continuously works to enhance and improve its network. One of the key design objectives of VzW's system is to provide seamless coverage without significant gaps or dead spots. VzW's radio transmitting and receiving facilities operate on a line-of-sight basis, requiring a clear path from the facility to the remote user. This dynamic requires antennas to be located in a location where the radio frequency signal is not obstructed or degraded by buildings or topographical features.

## **III. Project Narrative**

The Facility will consist of a 150' monopole tower with Twelve (12) panel antennas installed at the top. The Facility will be supported by a Twelve foot by Twenty-six foot (12' x 26') equipment shelter, both of which will be surrounded by a chain link fence. The fenced-in compound will only be accessible through a locked gate.

As shown in the coverage maps contained in the enclosed RF affidavit, VzW has a significant gap in its coverage in southern Deerfield. The purpose of the Facility is to fill that gap and improve VzW's network and coverage there, particularly along Route 43, Route 107, South Road, and the surrounding residential and agricultural areas. VzW's long-range plans in the Deerfield area are to continue to improve its service to residents and businesses in Deerfield. Because this is an unmanned facility, VzW is able to provide improved service with no impact on utilities, schools, or traffic. Technicians will visit the



J. HAMPE  
ASSOCIATES

35 Pleasant Street  
Concord, NH 03301  
Business (603) 224-4422  
Fax (603) 228-3881

December 11, 2013

Janet Samuels  
33 Old Candia Road  
Deerfield, New Hampshire

RE: Effect of cell tower near 33 Old Candia Road, Deerfield, NH

Dear Ms. Samuels:

I am writing to address your concern as to whether or not cell towers have any effect upon real estate value when close to a particular property. It is my understanding that a proposed cell tower would be located 700 feet from your front door and 500 ft. from your property line.

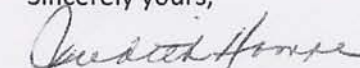
I have been practicing real estate for 30 years in the general Concord area and have marketed several properties near or adjacent to cell towers or utility power lines. I have listed and sold homes and land in Deerfield and appreciate the town to be a highly desired town in which to live. Unequivocally, based upon my experience, it is my opinion that such towers do have a negative impact upon property values. If within sight of a home or land parcel, they have a higher impact, approximately 25% to 50% of value and they influence marketing time by at least double. If adjacent, but not seen because of a tree buffer or position of the home or land, the impact is still strong due to fear of the effect of RF's (radio frequency radiation), or EMF's (electromagnetic field) in the case of power lines.

There have been many scientific studies on the effects of RF's and EMF's and I do not hold myself to be an expert on any of the research. I am, however, well aware of the psychological impact upon buyers from the fear of health issues that they perceive to be a factor. Buyers also fear that a future buyer might believe a tower dangerous to their family's health, and hence they also worry about resale value. Beyond psychological and health concerns is a noise factor which many consumers are not aware of. All cell towers must have air conditioners attached, and homeowners who live near towers complain that the noise level is intolerable, especially in the summer when they have windows open. The noise annoyance certainly detracts from a primary benefit of country properties, the enjoyment of peace and tranquility.

A tower within 500 feet of your property line will negatively impact future market value of your home significantly even if it can not be seen, as it will be heard. It will also double or triple the length of the time to market your home.

Please let me know if you have any further questions.

Sincerely yours,

  
Judith Hampe, Broker