

## PZC Minutes FEB 18 2014

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The Planning and Zoning Commission of the Town of Avon held a meeting at the Avon Town Hall on Tuesday, February 18, 2014. Present were Linda Keith, Chair, Carol Griffin, Vice Chair, Marianne Clark, and Alternates Elaine Primeau and Jenna Ryan. Mesdames Primeau and Ryan sat for the meeting. Absent were David Cappello, Peter Mahoney, and Christian Gackstatter. Also present was Steven Kushner, Director of Planning and Community Development.

Ms. Keith called the meeting to order at 7:30pm.

### APPROVAL OF MINUTES

Mrs. Primeau motioned to approve the minutes of the January 14, 2014, meeting, as submitted. The motion seconded by Mrs. Griffin received approval from Mesdames Primeau, Griffin, and Keith. Mesdames Clark and Ryan abstained, as they were absent from the January 14 meeting.

Mrs. Griffin motioned to approve the minutes of the January 28, 2014, meeting, as submitted. The motion, seconded by Mrs. Primeau, received unanimous approval.

### PUBLIC HEARING

App. #4702 -Sunset of Avon, LLC, owner, Borghesi Building & Engineering, applicant, request for Special Exception under Section VII.C.4.a.of Avon Zoning Regulations to permit 2 wall signs, 260 West Main Street, Parcel 4540260, in a CR Zone

The public hearing was continued from January 28.

Also heard at this time, but not part of the public hearing.

App. #4701 -Sunset of Avon LLC, owner, Borghesi Building & Engineering, applicant, request for Site Plan Modification to add canopy to existing building, 260 West Main Street, Parcel 4540260, in a CR Zone

Present were Rob Blanchette, Borghesi Building & Engineering; and Vickie Volpano, President, Goodwill.

Mr. Blanchette explained that the proposal is for 2 wall signs; one 63.47 SF sign for "Goodwill" and one 13.75 SF sign for "Donations". He noted the total square footage for both signs is 77.22 SF, which is well below the allowable 160 square feet. He noted that the "Goodwill" sign would be placed on the front of the building and the "Donations" sign would be placed over the canopy area to identify the donation area.

In response to Mrs. Griffin's question, Mr. Blanchette explained that the sign is lit from behind with LED illumination and that's why the color is blue during the day and white at night.

Mr. Kushner noted that sign illumination is often difficult to measure due to other light sources on the site, such as parking lot lights and other signs. He added that, in general, light intensity has not been a problem.

Mr. Blanchette indicated that the light intensity of the signs will meet the Town's criteria/standards.

Mr. Blanchette addressed the site plan application noting that the proposal is to add a 1,250 SF donation canopy off of the west side of the existing building; Goodwill would occupy 14,750 SF of the existing building space (former TJ Maxx location). He explained that a loading dock with a truck turnaround area is also proposed (TJ Maxx never had a loading dock). Handicap access is also being added to the front of the west side of the building. Mr. Blanchette displayed a site plan map showing the drop off donation/canopy area, loading dock, and driveway area. The driveway for the donation area will come off of the main parking lot.

In response to Ms. Keith's question, Mr. Blanchette explained that only minimal clearing will be needed because the proposed grading is very minimal.

Mr. Blanchette indicated that a small retention basin wrapped with a wood guard rail is proposed to address drainage and to ensure that there is no increased runoff. A retaining wall, 3½ feet at the highest

point, with a steel guide rail and 4-foot tall ornamental picket fence are also proposed.

In response to Mrs. Griffin's question, Mr. Blanchette explained that there would be plenty of room to plow snow near the proposed fence, as the proposed driveway is only single width with one-way traffic only.

Mr. Blanchette explained that the gable roof will be projected out 4 feet over the main entrance for "Goodwill" and additional windows will be added. Handicap parking will also be available in front of the building; grade level access.

In response to questions from Mesdames Keith and Clark, Mr. Blanchette explained that approximately 12 to 15 trees in total will have to be removed to construct the driveway to serve the canopy.

In response to Mrs. Griffin's questions, Mr. Blanchette explained that the dumpsters in the photos may belong to Snap Fitness, as that is the only business occupying the building at the moment. Mr.

Blanchette noted that a concrete dumpster pad exists on the site but is under snow right now and is not fenced. He noted that a compactor is proposed to be located in the rear portion of the site; the 10' x 35' pad is shown on the plan.

Mr. Kushner suggested that a condition of approval for this application could require that details for the dumpsters (identify dumpster pad areas with enclosures) for all the building tenants be provided to the Town for review and approval. He noted that two other "as or right" uses may be proposed for this building in the near future.

In response to Mrs. Griffin's question about loading dock needs for future tenants, Mr. Kushner explained that he doesn't feel the other 2 likely future tenants (liquor store and auto parts) would have the same types of large trucks making deliveries.

Attorney Robert M. Meyers, on behalf of the property owner, noted that the other 2 future tenants would both use the existing facility used by TJ Maxx, located to the rear of the existing building. He noted that no additional loading dock, other than the one proposed by

Mr. Blanchette, needs to be constructed. He further noted that he has no problem with a condition of approval relating to dumpsters, as just discussed by Mr. Kushner. Mr. Blanchette concluded by noting that there will also be some work done to the inside of the existing building.

Mr. Kushner asked Goodwill to provide information to the Commission relative to the overall operation such as how merchandise is received, sorted, and tagged for sale and how merchandise not suitable for sale is accumulated and loaded into trailers.

Vickie Volpano, President of Goodwill, noted that Mr. Kushner's explanation of the operation is very accurate and indicated that Goodwill served 19,000 individuals last year. She explained that merchandise that comes to the stores is from area donors. Vehicles pull up under the canopy and are greeted by an attendant; the vehicle driver receives a "thank you" and a tax receipt, if they wish. All goods received are inspected and either sold at the subject store or sold for secondary use. The items that do not sell within 3 to 4 weeks are pulled out and put into a baler; the bales are accumulated into loads and then sold around the world.

Mr. Kushner noted that trailers are not permitted to remain on site for storage purposes, per the Zoning Regulations. He further noted that the Town would ask Goodwill to have the tractor trailers come and collect the bales/deliveries and then leave the site, as opposed to having trailers remain on the site. Ms. Volpano concurred and noted her understanding. She explained that there is only interior access to the compactors and added that Goodwill is very conscious of being a good neighbor. She further explained that a trailer is expected to come to the site only 2 to 3 times a week.

Mr. Kushner noted his concern with nearby residential homes and the possibility of trailers showing up very early in the morning and idling in the parking lot. Ms. Volpano noted that Goodwill has stores in some very nice communities (like Westport) with similar close proximity to residential neighbors and guaranteed that the trailers would only be on site during normal operating hours.

In response to Mrs. Clark's questions, Ms. Volpano explained that the canopy could accommodate small u-haul trucks. Mr. Blanchette confirmed that a sign will be posted at the entrance as to the

maximum size allowed; it will note that trailers and oversized trucks are prohibited, as the canopy is only 14 feet high. He explained that the canopy could accommodate 2 vehicles, side by side, with a lot of queuing.

In response to Mrs. Primeau's question, Mr. Blanchette explained that the drop off area proposed here is segregated, away from parking areas, and is different than the drop off area setup at the Goodwill in Torrington.

There being no further input, the public hearing for App. #4702 was closed.

Mrs. Clark motioned to suspend the public hearing to consider Apps. #4701 and #4702. The motion, seconded by Mrs. Primeau, received unanimous approval.

Mrs. Clark motioned to waive Administrative Procedure #6 and consider Apps. #4701 and #4702. Mrs. Ryan seconded the motion that received unanimous approval.

App. #4701 -Sunset of Avon LLC, owner, Borghesi Building & Engineering, applicant, request for Site Plan Modification to add canopy to existing building, 260 West Main Street, Parcel 4540260, in a CR Zone

App. #4702 -Sunset of Avon, LLC, owner, Borghesi Building & Engineering, applicant, request for Special Exception under Section VII.C.4.a.of Avon Zoning Regulations to permit 2 wall signs, 260 West Main Street, Parcel 4540260, in a CR Zone

Mrs. Primeau motioned to approve Apps. #4701 and #4702 subject to the following conditions:

1. A detail for all trash dumpsters, including information for location, concrete pads, and fence enclosures, for all tenant spaces on the site shall be prepared and submitted to the Town for review and approval by the Director of Planning.
2. Tractor trailers shall not be stored on the site. All donated merchandise not suitable for resale at the site shall be stored indoors. Trucks that arrive to pick up merchandise shall not remain onsite overnight.

3.All pickups and deliveries shall occur during normal operating hours.

4.The light intensity for the wall sign for "Goodwill" shall not cause excessive glare to motorists.

The motion, seconded by Mrs. Clark, received unanimous approval.

Mrs. Ryan motioned to resume the public hearing. The motion, seconded by Mrs. Primeau, received unanimous approval.

App. #4708 -Meredith Corporation dba WFSB-TV, owner/applicant, request for Special Exception under Section IV.A.4.a.of Avon Zoning Regulations to replace communications tower and add Doppler Radar weather system, 375 Deercliff Road, Parcel 2090375, in an RU2A Zone

Also heard at this time but not part of the public hearing.

App. #4709 -Meredith Corporation dba WFSB-TV, owner/applicant, request for Site Plan Approval to replace communications tower and add Doppler Radar weather system, 375 Deercliff Road, Parcel 2090375, in an RU2A Zone

Present were Attorney Timothy Hollister, Shipman & Goodwin, LLP, representing Meredith Corporation and WFSB TV; Victor Zarrilli, Director of Engineering and Facilities, Meredith Corporation; Joseph Snelson, VP of Engineering, Meredith Corporation; Craig Lapinski, PE, Fuss & O'Neill, Inc.; and James Lee, radar systems engineer, Baron Services, Inc.; and Bruce DePrest, Scot Haney, Mark Dixon, of WFSB TV.

Ms. Keith indicated that the Commission has reviewed all the information provided but explained that much of the information is beyond the knowledge and expertise of the Commission and the Staff. She noted that the Commission would like to hire their own expert/specialist and therefore the public hearing will remain open after tonight's presentation.

Mr. Hollister reviewed the "Applicant's Supplemental Materials" dated February 18, 2014; copies were submitted to the Commission. He also submitted to the Commission copies of the "slides" from the PowerPoint presentation; extra copies of the "slides" were offered to the public. He also submitted to the Town Staff, for the record, a "thumb drive" of the presentation. Mr. Hollister noted, for the record,

that the public notices were viewed and acknowledged that they were accurate and extended his gratitude to Mr. Kushner and Mrs. Sadlon for their assistance with the application process.

Mr. Hollister began the PowerPoint presentation and explained that the subject site plan and special exception propose to reconstruct, in place, a 112-foot tower that currently exists on the site and to install a Doppler weather radar system, 14-foot dish in an 18-foot diameter dome, on the reconstructed tower. He explained that the subject Doppler radar system is currently located at Bradley Airport (on top of the control tower) but was located on the subject site from 1972 and active until the mid 1990s but remained physically on the site until 1999. The property at 375 Deercliff Road is a total of 21.6 acres located in the RU2A zone and not located within the ridgeline protection zone. The site is located approximately 1,500 feet to the east of the West Hartford Town line.

Mr. Hollister offered background information noting that WFSB's knowledge about the history of the site was mainly with David Patterson, a longtime engineer with the station who passed away approximately 5 months ago while this application was in process. He explained that there has been radio and TV transmission towers and equipment on this site since the 1940s and maybe earlier. In 1972 a Doppler radar system was installed on the subject site but controlled from the studio in downtown Hartford; the radar was active to approximately the mid 1990s and 1995 is the year being used as the best estimate as to when the system was deactivated. The system was physically removed from the site in 1999 and relocated to Bradley Airport.

Mr. Hollister explained the reasons why the Doppler radar is proposed to be moved back to 375 Deercliff Road:

1. The control tower at Bradley Field is slated for demolition by the FAA and the Federal government in the fall of 2014.
2. Since the September 11, 2001, air attacks, WFSB has had to go through "hoops" to get access to its own equipment in the control tower at the airport; the highest level of clearance is needed from Homeland Security. Having the radar system removed from the airport would help with maintenance and operation issues.
3. Part of the reason for having the radar at the airport is to provide real time information to the control tower and pilots but radar systems have a blackout area in close proximity to the radar itself, which includes some of the runways at Bradley Airport. The subject site on Deercliff Road is a higher elevation and a better configuration for the radar itself.

Mr. Hollister explained that Tab 5 in the application materials booklet, dated January 10, 2014, shows compliance with the special permit and site plan criteria contained in Section IV of the Zoning Regulations relating to the RU2A Zone. He further explained that the radio frequency standards are stringent; safety concerns/issues apply to both the general public and the employees who work on the site. Mr. Hollister pointed out that the information that will be presented is highly technical in nature and the best effort has been made to relate the numbers to everyday occurrences/comparisons but added that the team doesn't want to oversimplify the information to the point of being misleading. He acknowledged the Commission's earlier comments that they will want to hire their own technical expert for guidance/advice.

Mr. Hollister explained that he has learned from his involvement with this application that Doppler radar is not a wave but rather is a tightly focused, intermittent beam that rotates 360° as part of its function. The beam is aimed above the horizon; the tower is 110 feet high and the equipment is aimed at the horizon such that the impact on the ground is a tiny fraction of the allowable safety standard. He noted that the proposed 112-foot tower would be located no closer than 290 feet to any property lines; there are no fall zone issues. He indicated that there is currently one licensed, inactive Doppler radar in the area located at the Talcott Mountain Science Center. Mr. Hollister explained that WFSB TV has had a conversation with the Town's Emergency Management Director (James DiPace) about providing the Town of Avon with equipment such that the Town will get a real time feed of the weather data provided by the radar, should it be installed on Deercliff Road.

In response to Mr. Kushner's question, Mr. Hollister explained that the application process took a year because it was not clear when the control tower at the airport was scheduled to come down; mixed "signals" were received. When the application was prepared over the summer it was assumed that a new system was needed in the spring of 2014 but that has been pushed back to the fall of 2014. He further explained that the structural integrity of the existing tower was studied and deemed to not be adequate and, therefore, 4 months were spent acquiring new tower plans.

In response to Ms. Keith's comment, Mr. Hollister clarified that it is now known that the demolition of the control tower at the airport will be in October of 2014 rather than in early 2014, as his letter dated January 10, 2014, indicates.

Craig Lapinski, PE, Fuss & O'Neill, provided a review of the site plan application and the visual study performed (PowerPoint). He noted that there is an existing brick building on the subject site where the transmission equipment is housed; there is also an existing garage and various ancillary buildings with satellite dishes. There are 2 existing onsite communications towers; both towers are 400 feet high or higher. He noted that the proposed location of the Doppler radar ball is approximately 290 feet away from the nearest property line. The first step would be the installation of sediment and erosion controls; silt fence and a construction entrance would be installed and stockpile areas would be created for materials and equipment. He noted that there would be selective tree clearing in close proximity to the existing tower to facilitate construction. Mr. Lapinski noted that once these items are complete, the existing tower (112 feet tall) and the transmitter building located underneath the tower would be demolished. A new tower would be constructed in the same exact location along with a new transmitter building; new electrical lines would power the station by connecting the existing onsite building to the new transmitter building.

In response to Ms. Keith's question, Mr. Lapinski clarified that the existing tower would be dismantled rather than demolished, per se.

Mr. Lapinski explained that the existing tower is 10 feet taller and a little bit wider than the proposed tower. He addressed landscaping and noted that 16 new evergreen trees are proposed along Deercliff Road to provide additional screening. He explained that no trees are proposed behind the tower because there is an existing CL&P easement there and the area is routinely cleared. In addition, the area behind the tower is at a higher elevation and there is already a line of established trees such that adding trees in front of the existing trees is not deemed necessary.

Mr. Lapinski addressed the visualization study and noted that State topographic information was used. He noted that mature evergreen tree height is assumed to be between 80 and 90 feet and deciduous mature tree height is assumed to be between 50 and 60 feet. He indicated that representations of existing houses, shown at 30 feet high, were added to the plan to create a cross section view and to show where the line of sight would be from the second floor of the house. Transmission towers, approximately 400 feet high, are shown on the plan; the proposed tower is shown at the 110-foot level. He explained that the proposed tower is shown with the Doppler radar ball (18 feet in height) on the top, which shows what the projection might look like. He noted that the projection shows that it would be approximately 80 feet above the nearest home. Mr. Lapinski explained that relative to line of sight it is clear that the existing towers are already in the field of vision above the trees. He noted that photographs of the existing tower were taken from different locations in Avon and then "photoshop" was used to add on the Doppler radar ball, to scale; photographs were taken from Deercliff Road, Fisher Meadows, and Route 44 in the parking lot at 51 East Main (River Park - Grist Mill Restaurant). Mr. Lapinski concluded by displaying an aerial photograph of the site taken in 2012. He explained that houses that existed in 1995 (the last time the radar ball was on the subject site) are identified by a white dot and houses that did not exist in 1995 (constructed after the radar was removed from the site) but did exist in 2012 are identified with a pink dot.

Bruce DePrest, meteorologist for 36 years at WFSB TV, indicated that it is the goal and the obligation of WFSB to provide the earliest warning possible when severe weather is threatening. He noted that he

has witnessed numerous occasions where Doppler radar has worked to provide the earliest warning possible; he noted that when a tornado hit Connecticut in 2009 WFSB was on the air providing weather information 30 minutes before the National Weather Service was able to issue a tornado warning. He explained that there is a network of Doppler radar that surrounds Connecticut (Albany NY, Upton, NY, Taunton, MA) that are operated by the National Weather Service that provide information about incoming weather but WFSB has no control over them. He added that these radar systems are quite far away from CT and the curvature of the earth must be considered such that the radar beams may “overshoot” a developing storm that could become severe in central CT. He explained that a live Doppler radar in CT would provide the capability for weather updates every 20 seconds.

In response to Mrs. Griffin’s question, Mr. DePrest explained that WFSB TV Channel 3 owns the subject Doppler radar and has total control over it; no input would be necessary from the National Weather Service.

Mr. DePrest noted that CT gets severe thunderstorms quite frequently adding that last July there were 4 confirmed tornadoes within 4 days. He concluded by noting that the beam from radar located on Avon Mountain would be at a level equal to the height of the Mountain, the tower, and the Doppler dome itself and would provide real-time, life saving information about weather that is occurring near or close to the ground where we live. Having the radar located in central CT helps to negate the effects of the earth’s curvature that the aforementioned radar systems are susceptible to.

In response to Mrs. Ryan’s question, Victor Zarilli, Director of Engineering for WFSB, explained that some of the blackout areas at the airport are due to the terrain and some of the buildings in close proximity to the radar ball itself. Some of the blackout areas are due to the inherent properties of a Doppler and how the wave works. There are a lot of obstacles in the airport area; a lot of ridges in the area hinder the radar. He noted that if the radar was located on Avon Mountain there would be no hindrance and a perfect wave/pulse could be achieved.

In response to Mrs. Griffin’s question, Mr. Zarilli explained and clarified that a blackout area means no readings/data can be received in that area.

In response to Mrs. Clark’s comment, Mr. Zarilli confirmed that the pulse/wave goes out and comes back with information.

In response to Ms. Keith’s comments, Mr. Zarilli explained that there would be no physical hindrances on Avon Mountain but noted that there would be an inherent area relating to the pulse. Mr. Zarilli deferred to Mr. Snelson for additional information.

Joseph Snelson, VP Engineering for Meredith Corporation in Las Vegas, NV, explained that radar should be thought of as line of sight; if you stand atop a 100-foot-high building and look out at the horizon you will be limited by whatever you see that is getting in the way (i.e., a mountain, a building, or any kind of obstruction). He explained that a blackout area means a physical obstruction, which could include the earth (i.e., a hill, mountain), and further explained that the closer any obstruction is located to the radar the wider the blackout area will be.

In response to Ms. Keith’s question, Mr. Snelson explained that if the radar was located on Avon Mountain the blackout areas would be virtually nonexistent; the radar would be located higher than the trees.

Mr. Snelson continued with his portion of the PowerPoint presentation and displayed a “terrain path profile” showing the curvature of the earth noting that it covers a 60 mile area. He explained that how far out the radar can reach is dependent on what’s in the way and the height of a storm cloud, which can be as high as 30,000 to 40,000 feet in the air. He explained that the radar transmits a single pulse towards the horizon and then goes into a “listen” mode to detect storm activity. A parabolic antenna, approximately 14 feet in diameter, exists underneath the radar dome. The energy is directed out towards the horizon (0 to ½ degree) to see an approaching storm; the pulse is transmitted and the radar goes into a “listen” mode. Mr. Snelson provided an analogy for how radar works such that if you were standing in the Grand Canyon and yelled out “hello” and then listened for the return “hello” to come back, you

would experience the echo effect. He explained that the “listen” mode for radar is a lot longer than the transmit mode. He noted that the radar dish rotates 360° on average of one revolution per minute. Mr. Snelson compared radar to a flashlight; the flashlight emanates a beam and has similar properties to a Doppler radar in the reflector, as the light is focused in a shaft. If in a dark room with a flashlight one will see light spill to the side but the intensity is much weaker than that of the main beam. The Doppler radar dish focuses energy in a beam out towards the horizon and not towards the ground nearby. He noted that since the beam only stays in any location for less than a second (one complete revolution per minute), the amount of radio frequency energy that reaches the ground is small.

Mrs. Ryan commented that the beam rotates continuously. Mr. Snelson confirmed that the beam spins, yes.

Mr. Snelson addressed radio frequency basics and explained that the electromagnetic spectrum is divided into two major categories; non-ionizing and ionizing. He explained that radio frequency energy has been around since the beginning of time and noted that humans have been exposed to it long before the radio was ever developed; the sun, the moon and the stars all emit radio frequency energy. Mr. Snelson explained that there is also some energy that is radiated from cosmic that is called ionizing radiation. He explained that X Rays and gamma rays are forms of ionizing radiation (dentists use lead aprons to protect us from the ionizing radiation of X Rays). Below visible light is where the non-ionizing radiation exists. He explained that the energy levels of ionizing radiation can destroy human tissue but non-ionizing radiation does not destroy tissue and further explained that radio waves are well below visible light and therefore are non-ionizing radiation. Examples of non-ionizing radiation are power lines, radio, TV, microwaves, radar, and cell phones. He explained how a radio wave propagates from an antenna noting that, for example, if a pen is an antenna, as the energy leaves the pen it expands outward similar to a light bulb emanating light. The further you get away from a light bulb the lower the intensity; the rate decreases at a rate of  $\frac{1}{4}$  of the power every time the distance is doubled. He further explained that the energy that emits from radar, just like any TV or radio station, is not like that of a laser that utilizes a concentrated beam in a pinpoint. The radar expands as it goes outward.

Mr. Snelson addressed radio frequency compliance noting that there are regulations that must be complied with while also providing assurance to Meredith Corporation and its employees, as well as the general public, that they are not being exposed to radio frequency energy that would be an issue for them. He explained that food that cooks in a microwave oven gets hot and further explained that excessive exposure to radio frequency energy raises the body temperature, which is the issue/concern. He noted that the heat issue was studied many years ago by the Environmental Protection Agency (EPA) and others and a “number” was arrived at such that it was concluded that the average human body can withstand a specific amount of radio frequency energy that does not raise body temperature to the point of being problematic; the body could absorb a certain amount of energy. He explained that the FCC (Federal Communications Commission) decided that a safety margin was needed and took the “number” down 10 times and then in the last few years took the “number” down another 5 times for the general public. Mr. Snelson explained that compliance with the FCC’s regulations must be maintained (OET Bulletin #65 – Office of Engineering and Technology). He noted that an evaluation/study was prepared by a professional engineer with du Treil, Lundin & Rackley regarding the exposure that the proposed radar would have on the general public. Mr. Snelson indicated that before a license is applied for full compliance must be demonstrated/certified for both the employees and the public.

Requirements of Avon’s Planning and Zoning Commission, as well as the State of MA Department of Public Health, must also be complied with.

Mr. Snelson addressed Maximum Permissible Exposure (MPE) and explained that the graph (part of PowerPoint) indicates how much exposure can be realized by both employees and the public while remaining in compliance. He noted that information relative to radar is shown on the graph along with AM and FM radio and satellite information. He reiterated that the FCC’s exposure requirements for the general public are 5 times more stringent than the requirements for occupational workers.

Measurements were conducted at 8 selected points on the subject site to establish a baseline of the way the radio frequency (RF) exposure exists today. Mr. Snelson referred to the “Measurements Results” noting that the site is well below the compliance level for the FCC but noted that sometimes the results can vary from what is actually measured due to the environment (i.e., a fence post or sign could be in the way that radio energy can bounce off of).

In response to Ms. Keith’s question, Mr. Snelson explained spatial averaging noting that probe measurements are taken in various locations beginning at the ground level; the probe is slowly raised over a period of 10 seconds and the meter inside the probe is taking readings. Once the measurements/readings are done, the values are averaged; spatial averaging. The probe has one point at which a maximum reading is measured and the meter is programmed to hold that maximum value, thus the “maximum hold result”. Mr. Snelson noted that all the readings are well below 100%. He clarified that the FCC does not have a requirement relative to “maximum hold” but noted that Meredith Corporation includes it to add “flavor” as to what is going on in the RF world.

Mr. Kushner noted that it was represented earlier that everyone is subject to varying amounts of electromagnetic radiation in their daily lives and that today’s measurements of AM and FM stations are well within allowable standards. He asked how much additional exposure would be realized by homeowners living near the subject site. He noted that it was represented that the measurement is 1.9% of the allowable maximum but asked how this value contributes to the total/cumulative amount of radiation that people are exposed to on a daily basis; how significant is this additional amount.

In response to Mr. Kushner’s question, Mr. Snelson noted that the percentage is the maximum allowable and is the contribution from all sources. The “Calculation Results” show the total contribution from all sources (i.e., WFSB TV, WTIC FM and AM radio, etc.) along with the calculated contribution from the proposed Doppler radar, which is essentially zero. He commented that the numbers haven’t changed from zero radar to the addition of the Doppler radar.

Mr. Kushner commented that if radar was proposed for the subject site and no other broadcast facilities existed on the site (i.e., the property was vacant) that the calculations provided to the FCC would indicate a zero impact. Mr. Snelson concurred that the impact is virtually zero and explained that the impact is zero because the numbers are well within the 100% compliance. He clarified that when certification is provided to the FCC, the total contribution of everything must be provided.

Mr. Snelson indicated that the last phase involves the construction of the Doppler radar. He explained that before approval can be requested to run the radar all the time measurements need to be taken to demonstrate that the radar is in compliance. He reiterated that the antenna rotates approximately one revolution per minute and noted that an additional safety margin was implemented such that when the calculations were taken the antenna was stopped over the vicinity of the measurement point, not taking into account any time averaging of the antenna rotations. Mr. Snelson concluded by noting that even in this worst case scenario, compliance was still achieved.

Mr. Kushner clarified his earlier question and asked, for example, what kind of radiation exposure would be found in the average house if the engineer/expert took readings inside the house. He asked, further, how the numbers provided for the subject radar would contribute to the numbers found inside the house.

In response to Mr. Kushner’s question, Mr. Snelson indicated that he had a conversation with his consulting engineer (du Treil, Lundin & Rackley) about cell phones such that if a cell phone was run at full power (allowed by the FCC) and held up to someone’s head what kind of number would be generated. He explained that the resulting number was 300 times greater than what is shown in the “green” column (Calculated Contribution from Proposed Doppler Radar) on the “Calculation Results” chart. Mr. Snelson stated that Meredith Corporation purchased a radio frequency exposure probe (\$12K) and it is used at transmission sites owned by Meredith to ensure compliance for the workers, as well as the general public. He explained that he used the probe at the existing radar currently operating at Bradley Airport and noted that there was no change in the meter reading on the probe when the radar



beam came in the direction of the probe. Mr. Snelson added that not getting a meter reading, in this instance, is not really surprising, as the energy is located very high up, way above people's heads. Mr. Kushner noted his understanding of the cell phone comparison and asked if it would be possible for the engineer to provide the Town with a calculation as to what the average person might be exposed to within an average home and how this additional 5% or 10% might contribute to that total number. Mr. Snelson indicated that he has used meters in houses and also in his own house and noted that the results, on average, are less than 1%. He explained that adding that 1% to the number shown in the aforementioned "green" column on the "Calculation Results" chart would be the total number. He further explained that what a person experiences inside their home, taking the Doppler radar out of the equation, depends on a lot of things (i.e., is there a cell phone tower nearby, are they an amateur radio operator, do they have multiple WiFi systems and/or TVs and DVRs, etc.). He pointed out that DVR machines have an FCC marker which means that the device radiates something or it wouldn't have the FCC marker.

In response to Mr. Snelson's comments, Mr. Kushner asked if there are any published studies containing this type of information, as it could prove very interesting. Mr. Snelson indicated that he doesn't know what's available but noted that he could look into it.

In response to Mrs. Griffin's questions, Mr. Zarrilli explained that he manages the Staff and noted that employees are only onsite at 375 Deercliff Road occasionally. In response to Mrs. Griffin's concerns about possible problems because there aren't always employees onsite in the buildings, Mr. Zarrilli explained that the site is monitored via remote control. He further explained that the transmitters are remote controlled and CBS radio controls their transmitters via remote control as well. He noted that safety factors are built into the electronics such that if something goes wrong an alarm will go off and he will be notified at any time of the day or night by telephone. Mr. Zarrilli indicated that his employees are onsite on a regular basis to maintain the property and ensure that all systems are in compliance.

In response to Mrs. Griffin's question, Mr. Snelson explained that if a tower climber is needed to replace a piece of equipment, the Company has to ensure that compliance is met. Most tower crews carry an RF personal monitor as they climb the tower; the monitor lets them know via an alarm whenever they reach the point where the RF levels exceed the occupational levels. He noted that the climbers also wear RF protective clothing. Mr. Snelson explained that when the FCC license is renewed the Company must certify, again, that protection for all workers on the site is provided and also that all employees have been informed of locations where RF could exist. He stated that he has been in the broadcasting industry for 42 years noting that there are typically no issues on the ground level. He explained that the only issue for RF exposure would involve workers/tower climbers who need to be aware of what they have to do to be in compliance or someone working in one of the buildings on a piece of RF equipment. This type of equipment, furnished by the manufacturer, has shut offs.

Mr. Zarrilli explained that when a tower worker climbs a tower everything is shut off; there are backup systems in place to comply with safety standards.

James Lee, Baron Services, explained that radar systems employ several levels of protection; transmission of RF is inhibited if certain conditions occur within the system. He noted, for example, that if the antenna goes below 0°, the transmitter will shut off and radiation is disengaged. He explained that there are hard limits with regard to the antenna pedestal such that it can be adjusted to ensure that the antenna never goes below a certain elevation. There is a trap door on the base of the ray dome that if opened will inhibit radiation. If the transmitter loses communication with its controlling software, radiation will be inhibited.

In response to Mr. Kushner's question, Mr. Lee explained that Baron Services has approximately 40 to 50 installations and noted that the Company also upgrades the entire National Weather Service

network. He added that Baron Services has a couple of radar installations located overseas. Mr. Kushner asked how common/typical it is for the aforementioned installations to be located close to single-family homes. Mr. Lee indicated that he is not familiar with the locations of all the installations but noted that most of the stations that he knows about are located in a field. Mr. Kushner asked if Fuss & O'Neill could be supplied with this data to come up with an analysis about population densities. Mr. Lee confirmed that he could obtain that information.

Mr. Snelson explained that he worked in Kansas City for a time where a Baron's radar was installed on the south end of town. He noted that although the area is not heavily populated there are residences within 300/500/700 feet of the radar installation.

In response to Mrs. Clark's question, Mr. Snelson indicated that he does not have any information about individuals having health issues related to radar.

Mr. Hollister addressed compliance monitoring noting that compliance is required by both the Federal government and local regulations, which require an annual compliance report. He noted that a site visit could be arranged for the Commission, if they wish. He displayed a map prepared by Fuss & O'Neill showing all the properties along Deercliff Road in relation to the proposed radar. Mr. Hollister addressed the Town's right to hire an independent expert at the applicant's expense and noted that the applicant agrees to this procedure but asked that when the firm is identified that Meredith Corporation be notified to ensure that no relationship exists. He further requested that detailed invoices be provided and also that a copy of the proposal be provided to Meredith Corporation in advance of the continued hearing such that a response can be prepared by Meredith. Mr. Hollister thanked the Commission for their consideration.

The hearing was opened for public comment.

Glenn Dowd, resident of Robkins Road near the proposed facility, noting his understanding that the Commission will be hiring their own expert to look into the health issues that everyone is very concerned about. He communicated that the subject proposal is very alarming to the residents who live near the subject tower. The Commission is being asked for a special exception for pulses of non-ionized electromagnetic radiation to be beamed within hundreds of feet of existing homes 24 hours a day, 7 days a week, 365 days a year; he added that it's very serious business relating to health and property values and many other issues.

Ms. Keith explained that the Commission takes this issue very seriously and that is the reason an independent expert will be contracted.

Attorney Dowd conveyed his applause to Ms. Keith but added that he received the letters from the attorneys very late in the game. He noted that he did receive the information quickly from Mr. Kushner's office but added that it is difficult to find someone quickly to help explain the large amount of technical data involved. He noted that this is a vacation week and there are many concerned people that would have attended this hearing but are out of Town. Mr. Dowd asked if there is going to be time, before the hearing is closed, for the neighbors to hire their own expert if they feel the need after hearing testimony from the Commission's expert and it is not found satisfactory. He asked that consideration in this regard be given to the neighbors, as this issue is very important. Mr. Dowd concluded by noting that it appears that this issue should be of concern to everyone in any proximity to the facility.

In response to Ms. Keith's question, Mr. Kushner confirmed that the neighbors would certainly be allowed to hire their own expert and submit the information to the Commission. He clarified that State law dictates how long a public hearing can remain open; 35 days are allowed to conduct a hearing but an additional 65 days of extensions are permitted for a total of 100 days.

Mr. Dowd noted his understanding of Mr. Kushner's comments and further noted that there are other stations in the area that have a Doppler system. He acknowledged his understanding of the earlier testimony about the need for WFSB to have radar but added that he feels people should not be naïve; it's about ratings. He indicated that there's nothing wrong with WFSB wanting radar for ratings but asked that the issue not be cloaked in altruistic clothing that is not appropriate.

Ms. Keith addressed the audience and explained that the applicant is interested in the public health, safety and welfare of the State and further explained that the Commission's charge is that of the health safety and welfare of the people of Avon.

Karen Habig, resident of Sky View Drive, commented that she has a variety of concerns and noted that non ionizing radiation is not her field but acknowledged that she, like Mr. Dowd, has been trying to figure out the information. She indicated that the numbers provided do not represent the lived experience of the taxpayers of Avon. She noted that there are already issues with electrical interferences that occur in the homes in the area; it is very costly to rework phones and computers, etc. She noted her concerns and questioned whether the numbers, going forward, could ever be accurate. She added that there is concern about how the proposed radar would affect the CL&P lines on the street and how all of this has a lot of impact on daily living and resale values of homes in the area, not to mention the health situation.

Ms. Habig commented that there are enough existing Doppler radar systems around CT; 5 minutes or 20 seconds really doesn't make a big difference, as we don't live in a tornado zone.

Alan Habig, resident of Sky View Drive, noted his understanding that the beam rotates 24/7 and asked whether the return echo field is constant such that the residents are getting a double dose.

In response to Mr. Habig, Mr. Snelson explained that the return signal is extremely weak. Mr. Habig noted that radar is read by the return signal. Mr. Snelson concurred.

Mr. Habig commented that there is radar in Albany, Taunton, and Long Island and they do "sweeps" concurrently that include Hartford and asked why we need radar in Hartford. He noted his understanding of the curvature of the earth effect and reiterated that there are currently 3 radar systems nearby.

A resident of Deercliff Road asked what the effective range is of the aforementioned radar systems (Taunton, Albany, and Upton, LI, NY) relative to weather prediction.

In response to the Deercliff resident's questions, Mr. DePrest confirmed that other TV/radio stations in the area do not have their own radar system and clarified that what they may be claiming as their own are the radar systems located in Taunton, Albany and Upton, NY.

Mr. DePrest explained that the hope/intention of the proposed radar at 375 Deercliff is to be able to provide live weather/radar information to individuals on their mobile devices. He further explained that the range that the radar can detect depends on the height of the precipitation. For example, freezing drizzle can be very dangerous and the aforementioned radar systems are not going to see this weather condition in our area because the beam will shoot way above where the drizzle is forming, which is located much closer to ground level. Mr. DePrest noted that he believes that 75 miles is the most effective range for the subject weather radar system. The resident of Deercliff Road asked what the lowest altitude is that could be detected in this area from a signal from any of the 3 aforementioned radar sites. Mr. DePrest explained that he doesn't know the height of the beam from the aforementioned radar sites and it would have to be calculated.

Mr. Zarrilli explained that the beam "pulse" from the aforementioned radar sites is very high in this area. He noted that Doppler radar information is given to Bradley Airport and has been offered to emergency management in Avon as part of the subject application.

Mr. DePrest noted that the current radar is at 1.5° and added that by the time it reaches New Haven it is at 8,000 or 9,000 feet above the ground.

Ms. Habig asked why the current radar at the airport cannot be relocated to another area at the airport.

Mr. Zarrilli explained that Bradley Airport is taking down Terminal "B" where the radar is currently located and added that the radar is not being relocated at the airport due to issues with clearance on the runways. He explained that keeping the radar at the airport was explored for close to a year but added that no location could be provided on the airport property to build a tower; he added that no existing building could be provided either. He indicated that due to the clearance needed for the runways the

airport could not provide space for the radar but added that they did make an effort, as the airport was the first option.

Ms. Habig commented that the radar could be relocated somewhere else; it doesn't have to be in Avon. In response to Mrs. Ryan's question, Mr. Zarrilli explained that Meredith owns 22 acres on Deercliff Road and added that the Company has other towers in other locations but noted that Meredith Corporation doesn't own the property under the towers at the other locations. He further explained that the property where the AM antennas are located is owned by CBS Radio. Mr. Zarrilli indicated that purchasing land is a corporate decision and not made locally.

Mr. Dowd indicated that he would be very interested to know, at the next hearing, how many of these types of installation have been constructed in the shadows of residential neighborhoods.

There being no further input, the public hearing was continued.

Mrs. Primeau motioned to continue the public hearing for App. #4708 to the next meeting, scheduled for March 11. The motion, seconded by Mrs. Clark, received unanimous approval.

Mrs. Primeau motioned to table App. #4709 to the next meeting. The motion, seconded by Mrs. Clark, received unanimous approval.

The public hearing portion of the meeting was closed.

## PLANNING AND ZONING COMMISSION MEETING STAFF APPROVALS

App. #4707 - Avon Water Company, owner, Cellco Partnership dba Verizon Wireless, applicant, request for Staff Approval under Section X of Avon Zoning Regulations for minor modifications to upgrade existing antennas, 24 Ridgewood Road, Parcel 3730024, in an R40 Zone

Mr. Kushner explained that the Avon Water Company is allowing Verizon Wireless to change out/upgrade antennas at the water tank located at 24 Ridgewood Road. He noted that generally the upgrades involve the same number and size of antennas. Mr. Kushner further explained that all required testing/monitoring is done by and is under the jurisdiction of the CT Siting Council.

## OTHER BUSINESS

Annual Conference - Connecticut Federation of Planning and Zoning Agencies (CFPZA)

March 13, 2014 – Aqua Turf, Southington

It was noted that Mrs. Primeau has been on the Commission for 25 years and will be nominated for a Lifetime Achievement Award. Mr. Kushner noted that the Planning Department Staff is going to attend.

There being no further business, the meeting adjourned at 10:15pm.

Respectfully submitted,

Linda Sadlon, Clerk

## LEGAL NOTICE TOWN OF AVON

At a meeting held on February 18, 2014, the Planning and Zoning Commission of the Town of Avon voted as follows:

App. #4701 -Sunset of Avon LLC, owner, Borghesi Building & Engineering, applicant, request for Site Plan Modification to add canopy to existing building, 260 West Main Street, Parcel 4540260, in a CR Zone APPROVED WITH CONDITIONS

App. #4702 -Sunset of Avon, LLC, owner, Borghesi Building & Engineering, applicant, request for Special Exception under Section VII.C.4.a.of Avon Zoning Regulations to permit 2 wall signs, 260 West Main Street, Parcel 4540260, in a CR Zone APPROVED WITH CONDITIONS

Dated at Avon this 19th day of February, 2014. Copy of this notice is on file in the Office of the Town

Clerk, Avon Town Hall.

PLANNING AND ZONING COMMISSION

Linda Keith, Chair

Carol Griffin, Vice Chair

LEGAL NOTICE

TOWN OF AVON

The Planning and Zoning Commission of the Town of Avon will hold a Public Hearing on Tuesday, March 11, 2014, at 7:30 pm at the Avon Town Hall on the following:

App. #4710 -DP3 LLC, owner, Scott Morrison, applicant, request for Special Exception under Section V.O.5. of Avon Zoning Regulations to permit outdoor dining, 300 West Main Street, Parcel 4540300, in a CR Zone

App. #4711 -Bruce and Candace Heublein, owners, Clinton and Colleen Jambor, applicants, request for Special Exception under Section IX.E. of Avon Zoning Regulations to permit house construction in the ridgeline, 60 Gibraltar Lane, Parcel 2400060, in an RU2A Zone

App. #4712 - Silvio Brighenti Family, LLC, owner/applicant, request for 1-lot Resubdivision, 2.58 acres, 16 Timothy Way, Parcel 4350016, in an R40 Zone

App. #4713 - Silvio Brighenti Family, LLC, owner/applicant, request for Special Exception under Section IV.A.4.p. of Avon Zoning Regulations to permit one rear lot, 16 Timothy Way, Parcel 4350016, in an R40 Zone

All interested persons may appear and be heard and written communications will be received.

Applications are available for inspection in Planning and Community Development at the Avon Town Hall. Dated at Avon this 25th day of February, 2014.

PLANNING AND ZONING COMMISSION

Linda Keith, Chair

Carol Griffin, Vice Chair