

Kristin Alexander

From: John McGovern [John.McGovern@Sun.COM]
Sent: Monday, February 14, 2005 7:07 PM
To: Dore' Hunter
Cc: Roland Bartl; Lauren Rosenzweig; Planning Department
Subject: Re: Copy of proposed By Law changes related to amateur radio



chedester-decision.rohn-fall-radius-lett
pdf (75 KB)... er.pdf (4...

I found the Whately court decision and pleadings at :
<http://www.qth.com/antennazoning/ham/>

Fred Hopengarten, K1VR, (antennazoning.com website) is the national expert, who "wrote the book" and resides in Lincoln, MA .

The Chedester Case:(attached)

After you read the attached Chedester v Whately decision I think you'll conclude the proposed Acton bylaw is inconsistent in important decisive elements.

1. Absolute Height restrictions.

No absolute height zoning requirement -- absent a negotiation process-- is a major Chedester point, supported by multiple precedent cases in the decision. Communications efficiency requires height flexibility, and most mature tree stands in Acton are 90-110 feet as they were in Whately. This is probably the most relevant and decisive Acton criteria on height, along with general communications efficiency.

N.Acton is noted for VHF/UHF absorptive geology, so that could be another consideration requiring a higher antenna (for public service too) depending on location.

2. 1 Tower limitation

Acton has a proposed limitation to "one tower" which is not among (or like) the permitted criteria a town may enact. There are also several pre-existing multi tower installations in Acton as a matter of history.

Most long range wire antennas (dipoles, loops, etc.) require more than 1 support. In practice these antennas are often invisible, and better address any aesthetic ,health ,or safety concerns. You can look up these common antenna designs on the web.

I think without a well developed basis for this proposed limitation, "1 tower" is not on its face compliant with the State or Federal direction.

3. Setbacks.

I attach a ROHN tower document which indicates failure radius at a fraction of the height. As with anything this well engineered, I presume most of the neighborhood would be gone before the tower. When

a tower fails it's due to twisting motions, so it'll buckle/collapse straight down , not tip over.

Summary:

I doubt the proposed bylaw is consistent with the Chedester decision (State)or represents the minimum practical regulation (State or Federal), so I think it should be rethought.

The current Acton bylaw appears more State and Federally compliant with "customary installation" language, but could be exposed unless the setback requirements are updated for technical progress.

john

ps: I'm in SFO this week, so my responses may be delayed.

DoreHunter@aol.com wrote:

> John,
>
> This in partial response to your email to the Planning Board about
> getting a copy of the pending By-law change concerning radio antenna
> height.
>
> I have not as yet been shown the text of the proposed By-law, but
> understand it is in response to a court decision that effectively
> struck down another Town's application of a general zoning provision
> re a ham antenna. The staff person involved is Roland Bartl, I have
> copied this message to him, you might want to communicate with Roland
> as well as the Planning Board. I presume that Roland and/or the
> Chairperson of the Planning Board will respond to your request.
>
> If need be don't hesitate to get back to me.
>
> Regards,
> Dore' Hunter
> Chairman, Board of Selectman, Town of Acton, MA
> Tel: 978-263-0882
> Fax: 978-263-9230
> Email: DoreHunter@aol.com

--

John McGovern, Corp. Customs Manager
Sun Microsystems, Inc., MS UMAR02, Ste. 100
199 Forest Street, Marlborough, MA 01752
ph. (978) 429-4035; fx. (978) 429-4035

~~~~~  
NOTICE: This email message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.  
~~~~~

COMMONWEALTH OF MASSACHUSETTS

FRANKLIN, ss.

**SUPERIOR COURT
CIVIL ACTION No. 03-00002**

RICHARD CHEDESTER

VS.

TOWN OF WHATELY & others¹

MEMORANDUM OF DECISION AND ORDER

INTRODUCTION

The plaintiff brings this action under G.L. c. 40A, § 17 appealing a decision of the Zoning Board of Appeals for the Town of Whately revoking a building permit issued to him for the construction of a 140' radio tower/antenna. For the reasons set forth below, this Court finds that section 171-9C of the Whatley Zoning By-law, on its face and as applied, (1) is preempted by a FCC Declaratory Ruling known as PRB-1 and (2) violates G.L. c. 40A, § 3, ¶ 10. Additionally, this Court finds that the Zoning Board's decision must be reversed because it was based on an untenable interpretation of section 171-9C and G.L. c. 40A, § 3, ¶ 10.

BACKGROUND

The plaintiff, Richard Chedester ("Chedester"), is an electrical engineer and a licensed amateur radio or "HAM radio" operator. He lives in the Town of Whately ("Whately") on a wooded hillside where his ability to transmit and receive radio signals is seriously impeded by

¹ Roger P. Lipton, Debra Carney, and Robert Smith in their capacities as members of the Zoning Board 01 Appeals of the Town of Whately; Fred Bardwell, Peter Degregorio, Anita Husted, Nicolas Jones and John Torcia in their capacities as members of the Whately Planning Board; and Edward H. Berman and Julia C. Berman.

the topography and trees. In order to enhance his ability to transmit and receive high frequency radio signals, he decided to build a radio tower that enables him to place his radio antenna above the tree line and to broadcast the signals southerly along the natural corridor of the Pioneer Valley.² Chedester found a tower that met his specifications at an on-line auction service and asked the town's building inspector whether such a use was permitted. The building inspector informed him that a determination could only be made by applying for a building permit. Accordingly, Chedester applied for such a permit and was approved. He then purchased the offending tower, had it transported to his home from Seattle, Washington, and began erecting it. The tower is a formidable triangular structure with the feet spread 19' apart at the base and 9' apart at the top. At the base of the tower, each leg is supported by a concrete foundation that protrudes several feet above the ground. In a fully assembled state, the tower is 140' high. When the installation process was well under way, the defendants Edward and Julia Berman ("Bermans") learned of Chedester's plans and complained to the Whately town officials. The Bermans are neighbors of Chedester and run a bed and breakfast which has a panoramic view of the Pioneer Valley that would be seriously compromised by the tower. Both the Bermans and the Town of Whately Planning Board ("Planning Board") appealed to the town's Zoning Board of Appeals ("Zoning Board") seeking to have the Building Inspector's decision to issue the permit reversed. After hearing and a site visit, the Zoning Board voted to rescind Chedester's building permit. Chedester has taken a timely appeal of that rescission under the provisions of G.L. c. 40A, § 17.

² There is no intimation that Chedester was attempting to project his antenna above the peak of the hillside

DISCUSSION

I. Standard of Review

General Laws c. 40A, § 17 provides a mechanism for judicial review to a party aggrieved by the decision of a board of appeals or any special permit granting authority. Under section 17, the reviewing court

"shall hear all evidence pertinent to the authority of the board or permit granting authority and determine the facts, and upon the facts as so determined, annul such decision if found to exceed the authority of the board or such permit granting authority or make such other decree as justice and equity may require."

G.L. c. 40A, § 17. The hearing before the court is de novo, and the court is not restricted to evidence that was presented to the board. See Bicknell Realty Co. v. Board of Appeal of Boston, 330 Mass. 676, 679 (1953). "Judicial review is nevertheless circumscribed: the decision of the board cannot be disturbed unless it is based on a legally untenable ground, or is unreasonable, whimsical, capricious or arbitrary." Roberts v. Southwestern Bell Mobile Svs., Inc., 429 Mass. 478, 486 (1999) (citations and quotations omitted).

II. Section 171-9C of the Whately Zoning By-law and the Applicability of G.L. c. 40A, § 3 and PRB-1

The Zoning Board's rescission of Chedester's building permit was based upon section 171-9C of the Town of Whately Zoning By-law. That section of the by-law provides that

"No building or structure shall exceed a maximum height of 35 feet, measured from the highest point of the roof to the average finished ground grade on the premises. Measurements shall not include antennas, chimneys, or any other permitted accessory which is not intended for human habitation. Height restrictions do not apply to agricultural uses, municipal buildings and churches."

The Zoning Board, in its decision, reasoned that although the by-law allows antennas; it does not

allow structures to which an antenna is attached to exceed 35'. In making this decision, the Zoning Board also determined that G.L. c. 40A, § 3 did not supercede the by-law's 35' height limitation.

G.L. c. 40A, § 3, where pertinent, provides that:

"No zoning ordinance or by-law shall prohibit the construction or use of an antenna structure by a federally licensed amateur radio operator. Zoning ordinances and by-laws may reasonably regulate the location and height of such antenna structures for the purposes of health, safety, or aesthetics; provided, however, that such ordinances and bylaws reasonably allow for sufficient height of such antenna structures so as to effectively accommodate amateur radio communications by federally licensed amateur radio operators and constitute the minimum practicable regulation necessary to accomplish the legitimate purposes of the city or town enacting such ordinance or by-law."³

The aforementioned language was added to G.L. c. 40A, § 3 in 1995 in an apparent effort to enable local zoning ordinances and by-laws to comply with a Federal Communications Commission ("FCC") declaratory ruling known as "PRB-1"⁴ In that ruling, the FCC recognized the strong federal interest in promoting amateur radio operations, particularly with respect to providing emergency communications. At the same time, the FCC acknowledged the important state interest reflected in local zoning ordinances, and concluded that a limited preemption policy was warranted. PRB-1 provides that:

"Because amateur station communications are only as effective as the antennas employed, antenna height restrictions directly affect the effectiveness of amateur communications. Some amateur antenna configurations require more substantial installations than others if they are to provide the amateur operator with the communications that he/she desires to engage in. . . . Nevertheless, local regulations which involve placement, screening, or

³ This section of the Massachusetts Zoning Statute has not yet been construed by a Massachusetts court. See Mark Bobrowski, *Handbook of Massachusetts Land Use and Planning Law* 143 (2d ed. 2002) (indicating that "there are no reported cases interpreting this clause").

⁴ On September 19, 1985, the FCC issued In re Federal Preemption of State & Local Regulations Pertaining to Amateur Radio Facilities, 50 Fed.Reg. 38,813 (1985) (codified at 47 CFR § 97.15(e) (2000)). For convenience, this Court will refer to this ruling as PRB-1.

height of antennas based on health, safety, or aesthetic considerations must be crafted to accommodate reasonably amateur communications, and to represent the minimum practicable regulation to accomplish the local authority's legitimate purpose."

Chedester's argument is two-fold. He first argues that because antennas are exempt from the zoning by-law's 35' height restriction, the tower that conveys the antennas should also be exempt. He also argues that G.L. c. 40A, § 3 affords extra protection to amateur radio "antenna structures" and this tower should enjoy that protection as well. To hold otherwise would violate the "reasonable accommodation" requirements of PRB-1.

Whately argues that it is in compliance with G.L. c. 40A, § 3 and PRB-1 because its by-law does not unreasonably restrict antenna height. In fact, it argues, the by-law does not restrict antenna height at all, only towers as they are "structures." Whately further argues that since PRB-1 is a "limited preemption policy," the by-law's 35' height restriction for antenna towers is consistent with and in compliance with the spirit and intent of both section 3 and PRB-1.

Whately's position has two flaws. First, if section 171-9C limits structures conveying antennas to 35', then that portion of the by-law is both violative of section 3 and preempted by PRB-1 because it creates an absolute and unreasonable restriction on the height of antennas. See Pentel v. City of Mendota Heights, 13 F.3d 1261, 1263 (8th Cir. 1994); Evans v. Board of County Comm'rs, 994 F.2d 755, 760-761 (10th Cir. 1993); Palmer v. City of Saratoga, 180 F. Supp. 2d 379, 384 (N.D.N.Y. 2003). In each of the aforementioned cases, the courts held that local ordinances would be facially preempted by PRB-1 if they set absolute and unvarying height

restrictions on amateur radio antennas⁵ without providing for a special use provision.⁶ As previously noted, the Legislature, in drafting G.L. c. 40A, § 3, ¶ 10, adopted much of the critical regulatory language of PRB-1 so as to ensure that local zoning ordinances and by-laws complied with federal law. Accordingly, the preemption of absolute and unvarying height restrictions under PRB-1, necessitates that such restrictions are also violative of G.L. c. 40A, § 3, ¶ 10.

Moreover, Whately's argument that it does not impermissibly regulate antenna height, but merely the height of the underlying antenna towers, misconstrues the statutory language of G.L. c. 40A, § 3, ¶ 10, which in turn governs the regulatory breadth of section 171-9C.⁷ Contrary to Whately's interpretation, the language of section 3 makes it clear that zoning ordinances may reasonably regulate, but not prohibit "antenna structures." In construing G.L. c. 40A, § 3, ¶ 10, this Court gives the words "antenna structures" their plain meaning and additionally notes that these very words are used at least three times in this same paragraph. See *Commonwealth v. Brown*, 431 Mass. 772, 775 (2000) ("Where the language of a statute is plain and unambiguous, it must be given its ordinary meaning."). A plain reading of section 3 reveals that what Chedester proposes to install is in fact an "antenna structure." Indeed, the very purpose of the tower is to convey the antenna above the tree tops so that a radio signal can be sent and received by Chedester. As Chedester aptly notes, it would be a preposterous notion to assume that his

⁵ Notably, in each of these cases, both the antenna and its underlying tower were considered one entity under the regulatory language of PRB-1 and 47 CFR § 97.15(e) (2000).

⁶ Section 171-9C does not explicitly provide for a special use provision for amateur radio antennas that exceed the 35' restriction.

⁷ See also *supra*, n.5 (noting that several federal courts have construed the words "station antenna structure" to include antennas and their underlying towers under the relevant provisions of PRB-1 and 47 CFR § 97.15(e) (2000)).

antenna could simply float free in the air, separate from a supporting structure.

Furthermore, this Court, at the request of the defendants, also took a view of the subject property, the neighborhood in which it is located, and the Berman property. Whately is the quintessential New England village. It is pristine, picturesque, and snuggled into the western slopes of the Pioneer Valley. It is this hilly, heavily wooded topography which makes the by-law's 35' restriction unreasonable. A 35' height restriction would effectively mean that no radio communications would be able to be transmitted. Moreover, such a result would defeat the purpose of PRB- I and G.L c. 40A, § 3, ¶ 10, which are both clearly aimed at promoting amateur radio communications.

Secondly, if as Whately contends, the by-law, with its 35' restriction, is intended to "reasonably regulate the location and height of such antenna structures for the purposes of health, safety, or aesthetics;" it misses the mark widely in both substance and application. Section 3 of G.L. c. 40A and PRB-1 envision a local by-law that reasonably accommodates such structures and reserves to the town the right to regulate location and height. PRB-1 further suggests to the town that it may reasonably consider "placement, screening, or height of antennas based on health, safety, or aesthetic considerations" but that such restrictions "must be crafted to accommodate reasonably, amateur communications, and to represent the minimum practicable regulation to accomplish the local authority's legitimate purpose." Section 171-9C of the by-law mandates a height requirement for structures within the town which exempts antennas but not the towers which convey them. Section 3 and PRB-1 clearly expects that any zoning by-law which attempts to regulate "antenna structures" address location, height, placement, screening while taking into consideration health, safety, and aesthetic concerns. The Whately by-law does not

address such concerns.

Additionally, there is also evidence that Whately did not apply section 171-9C in a manner which reasonably accommodated Chedester's amateur communications as required by both PRB-1 and G.L c. 40A, § 3.⁸ Several courts have recently held that the "reasonable accommodation standard requires a municipality to (1) consider the application [of the amateur radio operator], (2) make factual findings, and (3) attempt to negotiate a satisfactory compromise with the applicant." Palmer, 180 F. Supp. 2d at 385; see also Pentel, 13 F.3d at 1264 (quoting Howard v. City of Burlingame, 937 F.2d 1376, 1380 (9th Cir. 1991)). In this case, the Zoning Board arguably satisfied the first two prongs of this test when it made factual findings after conducting both a hearing and a site review of the Berman and Chedester properties. The Zoning Board, however, failed to satisfy the third prong of this standard by not attempting to negotiate a satisfactory compromise with Chedester. It is clear that section 171-9C does not comply with the mandates of § 3 since it provides no mechanism to address locaton, height, placement, screening, etc. In the absence of such a framework negotiation would not be required since there are no guidelines within which to negotiate.

Based on foregoing analysis, this Court finds that section 171-9C of the Whately Zoning By-law, on its face and as applied, (1) is preempted by PRB-1 and (2) violates G.L c. 40A, § 3, , 10. Accordingly, this Court finds that the Zoning Board's decision must be reversed and the building permit reinstated.

ORDER

For the foregoing reasons, this Court hereby declares that section 171-9C of the Whately

⁸ G.L c. 40A, § 3 uses the language "effectively accommodate."

Zoning By-law, on its face and as applied by the Zoning Board, (1) is preempted by PRB-1 and (2) violates G.L. c. 40A, § 3, ¶ 10. This Court **further declares** that the application of section 171-9C of the Whately Zoning By-law by the Zoning Board in this case rested on a legally untenable ground. Accordingly, Chedester's building permit must be reinstated.

/s/
Timothy Hillman
Justice of the Superior Court

Dated: November 22, 2004

Entered: November 24, 2004

World Headquarters
6718 W. Plank Rd.
Peoria, IL 61604 USA
Ph: 309-697-4400
FAX: 309-697-5612



7th of February 2002

Thomas E. Nelson
24 Stickney Hill Road
Union, CT 06076

Reference: Guyed Tower Design

Dear Mr. Nelson,

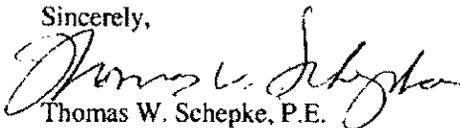
Guyed towers provided by ROHN are designed in accordance with ANSI/TIA/EIA-222-F Standards for specified wind and/or ice loads.

In the event an extreme wind speed were to occur, a failure would not be expected to occur the instant the design wind speed was exceeded. All tower members would be designed to support a minimum of 1.25 times their design load without permanent deformation.

Many concerned authorities and citizens have asked the question, "within what distance from the base of the tower (fall radius) would the structure fall under a catastrophic wind or ice loading?" As with any structure, the final position after collapse would be impossible to predict. However, within a reasonable degree of engineering certainty, assuming all guys remain intact, the referenced tower would most likely fail by buckling. A collapse due to such failure would most likely fall within a distance from the base equal to one-third to one-half the height of the structure.

Please contact us at your convenience should you have further questions concerning the safety of tower or other aspects of tower design.

Sincerely,


Thomas W. Schepke, P.E.
Engineering Administrator



cc: ATC - Salem, OR
Tim Rohn