Board of Zoning Appeal

City of Cambridge

831 Mass. Ave.

Cambridge, MA 02139

Dear Zoning Board members,

As the President of Friends of Alewife Reservation, I submit my vehement opposition to the proposed Verizon cell phone tower at 799 Concord Ave. in Cambridge, less than a quarter of a mile from this precious wildlife refuge. Alewife Reservation is a unique natural oasis providing protected habitat for a wide variety of animals and birds, and it is an important refuge for birds. See Friends of Alewife Reservation assessments: <http://friendsofalewifereservation.org/2006_02_ecologicaloverview_normandeauassociates.htm>

<http://friendsofalewifereservation.org/2002_birdsurvey.htm>

World Health Organization has clearly made its point along with most European countries which have established

limited megawatts per centimeter squared because of the country-wide research conducted  in India, and other countries as well: <http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf>

For health and safety of living things, Switzerland has established only 4 megawatts per centimeter squared while Russia and Italy have 10 megawatts per centimeter squared. While the U.S. has established 580 megawatts for its normal limit, we say this figure within 300 yards of the Alewife Reservation is unacceptable because of the importance of the wildlife in the meadows, marshes and woodlands, noting the large amount of pollination that takes place in the area, as well as 40 species of nesting birds.

Cell phone towers are reported to have a destructive effect on wildlife and especially on bees and migrating birds. They create electromagnetic fields (EMF) which disrupt bees' ability to orient themselves and return to their hives (therefore believed to be partially or fully responsible for the dramatic loss of bees in the past few years) and they are found to disrupt the navigation system of migrating birds. In a study conducted by Dr. J. Kuhn of Koblenz University on 8 beehives, a cordless phone was put in 4 of the 8 hives (this study was done before cell phones).In the cordless-phone hives very few bees returned and in one hive none of the bees returned, while bees returned to the non-cordless-phone hives at the normal rate. Clearly there was major disruption of their navigation system from a cordless phone, and the emission close to a cell phone tower is more powerful than that from cordless phones.

The Indian government commissioned a review of nearly 1000 studies on the effects of cell phone towers on birds, bees and other wildlife and concluded that they are dangerous and must be restricted near wildlife areas. This extensive report can be downloaded at [www.academia.edu/1746940](http://www.academia.edu/1746940%22%20%5Ct%20%22_blank).

Exposure to electromagnetic radiation fields was shown to evoke changes in behavior, developmental anomalies and increased death rate in bees, amphibians, mammals and humans in Zach and Mayoh 1982; Batellier et al. 2008; Nicholls and Racey 2007; Bergeron 2008; Copplestone 2005; Sahib 2011. Bees appear to be especially sensitive to electromagnetic fields (Ho 2007; Sharma and Kumar 2010).

Alewife Reservation is the most important protected wildlife area in Cambridge and the surrounding region. The cell phone tower could disrupt and destroy this precious habitat. The City of Cambridge Board of Zoning Appeal must not allow this to happen. While new residents may want better cell phone reception, our rare wildlife refuge for the Boston metropolitan region should be free of intense EMF impacts.

Sincerely,

Ellen Mass

President, Board of Directors

Friends of Alewife Reservation Inc.