



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Petition No. 350
Cellco Partnership d/b/a Bell Atlantic NYNEX Mobile
Groton, Connecticut
Staff Report
March 28, 1996

On March 21, 1996, Edward S. Wilensky and William H. Smith of the Connecticut Siting Council (Council), and Joel M. Rinebold and Fred O. Cunliffe of Council staff met with Jennifer Young Gaudet and Wayne Lukackek of BANM Partnership d/b/a Bell Atlantic NYNEX Mobile (BANM), Peter Van Wilgen of Springwichee Cellular Limited Partnership (Springwichee) and Carl Sawyer a communications liaison for the Town for a review of this petition.

BANM is petitioning the Council for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the installation of a new 148-foot lattice tower on a 37.6 acre site off Groton Long Point Road owned by the Town of Groton. The site is the location of the Town of Groton's municipal services complex which consists of the Town Police Department Headquarters, Town Public Works Department garage and maintenance facility, a recycling drop-off facility, and the Town dog pound.

The site also includes three existing telecommunications towers owned by the Town located near to and adjacent to the police department headquarters. These towers are as follows:

Tower No. 1 is a self-supporting lattice tower that stands approximately 110 feet above ground level (agl) at an elevation of 172 feet above mean sea level (amsl). Several approximately 20-foot whip antennas are mounted at the top of the tower bringing the overall height to approximately 130 feet agl. This tower is currently lighted by white strobe by day and red light at night.

Tower No. 2 is a guyed lattice tower approximately 80 feet agl in height at an elevation of 187 feet amsl. An approximate 20-foot whip antenna is mounted at the top of the tower bringing the overall height to approximately 100 feet agl.

Tower No. 3 is a self-supporting lattice tower that stands approximately 50 feet agl at an elevation of 170 feet amsl. An approximate 10-foot whip antenna is mounted at the top of the tower to bring the overall height of the structure to 60 feet agl, and

Several whip antennas are mounted on the roof of the Police Department Headquarters.

Currently, BANM has two six-foot whip antennas mounted on the top of the 100-foot lattice tower. Numerous municipal antennas are mounted at all levels of the tower. Springwich has two small panel type antennas mounted on the bottom third of the tower.

BANM proposes to construct a 148-foot self-supporting lattice tower approximately 60 feet east of the existing 110-foot tower and south of a planned addition to the police department headquarters. BANM would house its radio equipment in a portion of the new addition and would mount 15 panel type antennas with the center of radiation at 146 feet agl on the tower. At this time, the Town plans to relocate antennas presently located on the 50-foot tower and on the roof of the Police Department Headquarters to the new tower but has not specified the number of antennas or the height at which they would be mounted on the new tower. Springwich would relocate its antennas to the new tower at the 140-foot level of the tower. Following relocation of Town antennas, BANM proposes to dismantle Tower No. 3, the 50-foot self-supporting lattice tower.

The proposed tower is approximately 2 miles northeast of the Groton - New London Airport. The Federal Aviation Administration (FAA) recommends obstruction marking and/or lighting to the proposed tower. BANM plans to place a white strobe by day and red light by night consistent with FAA advisory circular AC 70/7460-1H, Chapters 3, 4, 5, and 13. Also, the FAA has stated that the tower including appurtenances shall not exceed 148 feet agl.

Clearing and grading is necessary to install the tower. At the Town's request, some existing trees would be relocated on the property and new trees would be planted outside the security fence surrounding the new tower. Because the facility is within a developed parcel of property, no access road nor equipment building would need to be constructed.

The power density levels from the proposed tower are unknown and no modeling has been performed for all antennas because BANM does not have a final count of municipal antennas and other potential users. However, BANM contends that the total radio frequency electromagnetic radiation power density would be less than 15 percent of the American National Standards Institute (ANSI) standard, based on a prior notice of intent to modify an existing tower by BANM on May 10, 1993 and a request to approve tower sharing by Springwich on December 9, 1994. Furthermore, BANM states the relocation of existing antennas to higher elevations on the proposed tower would generally decrease the overall power density. Council staff cannot confirm total power density levels from the proposed facility.

BANM examined options of consolidating antennas from more than one tower. However, the Town expressed concerns that complete antenna consolidation might cause interference between the various transmitting antennas operating on a single tower.

Correspondence from the Town's Director of Planning, dated March 25, 1996, states the Town supports the proposed installation of a 148-foot lattice tower, which will improve the Town's emergency service communications system. On October 12, 1993, the Town's Planning Commission, in a memo to the Town Manager, recommends leasing Town land to BANM. On

March 12, 1996, the Town's Planning Commission approved the site plan for the addition to the police department headquarters

BANM believes the installation of the proposed 148-foot tower would not cause a significant alteration in the physical and environmental characteristics of the site. The site consists of a municipal service complex with several buildings and includes three telecommunications tower ranging in overall structure height from 60 feet to 130 feet. The proposed tower would be consistent with the current uses of the site which have been publicly visible for several years

Moreover, the Council previously determined that no Certificate was necessary for a multiple tower site when Springwich replaced two 80-foot towers with a new 120-foot tower and equipment building adjacent to a 125-foot and 123-foot tower (Petition No. 314).

Thus BANM requests the Council to provide a declaratory ruling that no substantial adverse environmental effect is associated with the construction of a 148-foot lattice tower within a municipal service complex and multiple tower site and that no Certificate of Environmental Compatibility and Public Need is necessary.

Fred O. Cunliffe
Siting Analyst