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Springwich Cellular Limited Partnership

April 26, 1999

RECEIVED

Peter W. van Wilgen
Director - Real Estate Operations

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

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CONNECTICUT
SITING COUNCIL

Re: Request by Springwich Cellular Limited Partnership for an
Order to Approve the Shared Use of a Tower Facility
at 69 Wheeler Street, New Haven, Connecticut

Dear Mr. Gelston:

Pursuant to Connecticut General Statutes (C.G.S.) §16-50aa, Springwich Cellular Limited Partnership ("Springwich") hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed shared use by Springwich of a tower located on property known as 69 Wheeler Street, New Haven, Connecticut. The property, the location of Laydon Construction, is owned by Elmer F. and William J. Laydon. The property is located approximately 1700 feet northeast of Interstate 95 off of Exit 49 near the Quinnipiac River Bridge.

The subject parcel and the surrounding area is zoned IH-Heavy Industrial. An existing, guyed-lattice tower on the roof of the owner's building, the top of which is approximately 96 feet above ground level, is currently used by the construction company for two-way communications with its trucks. The construction company's antenna is on the top of the tower, making the overall height of the facility 101.5 feet AGL.

Neither the existing building nor the existing tower is structurally suitable for the proposed additional shared use. Springwich is therefore proposing to replace the existing rooftop, guyed-lattice tower with a free standing 90 foot tall monopole, place the construction company and Springwich antennas on the tower for an overall height of approximately 96 feet AGL, and locate an approximately 12 foot by 26 foot equipment shelter at the base of the tower.

Springwich requests that the Council find that the proposed shared use of the tower satisfies the criteria stated in C.G.S. §16-50aa, and issue an order approving the proposed use.

Background

The building is located on Wheeler Street off of Forbes Avenue in a IH-Heavy Industrial zone. The parcel is surrounded by other properties in the IH zone.

The existing tower is an approximately 58-foot guyed-lattice tower located on the roof of the Laydon construction office building. Currently, the tower has one working antenna owned and operated by Laydon Construction. The roof of the building where the tower is located is approximately 38 feet AGL.

As shown on the attached drawings and as further described below, Springwich proposes to replace the existing rooftop guyed-lattice tower with a monopole tower located in the parking lot adjacent to the Laydon Construction building. Springwich would place its equipment shelter at the base of the tower. Springwich and the property owner have agreed to the proposed shared use of this facility pursuant to mutually acceptable terms and conditions.

At the request of Mr. Phillip Bolduc, Zoning Director for the City of New Haven, Springwich is proposing to construct a monopole, 90 feet AGL in height, designed to accept a second antenna platform for a future as yet undetermined carrier; however, Springwich's initial construction plan is to place a single antenna platform on the tower. Springwich would install twelve (12) Allgon Model 7120.16 antennas, approximately 52 inches in length, on the tower, with the top of the antennas at 90 feet AGL. The existing Laydon Construction antenna would be relocated on top of the proposed replacement tower for an overall height of approximately 96 feet AGL, approximately five feet below the overall height of the existing facility.

As is shown on the attached site plan, the location of the proposed monopole was chosen in cooperation with the landowners. The Laydon's did not want the tower located elsewhere on their property because of the potential of a tower and equipment shelter interfering with their business related activities that occur on the parcel. The paved driveway where the facility is proposed is used for visits to the storage garage behind (to the east of) the project area and some parking. The proposed location and tower type would not interfere with the regular parking or access to the storage garage.

The width of the existing guyed tower is approximately twelve inches per face, while the replacement monopole will be approximately 28 inches in diameter at the base, tapering to approximately 16 inches at the top. Upon completion of the new tower, the existing tower and guy wires would be removed.

Springwich has consulted with Mr. Phillip Bolduc concerning the proposed project. Pursuant to the Zoning Director's recommendation and in an effort to encourage co-location, Springwich plans to design a two-carrier monopole.

Discussion

C.G.S. §16-50aa provides that, upon written request for approval of a proposed shared use, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns, the council shall issue an order approving such shared use." (C.G.S. §16-50aa(c)(1))

The shared use of the tower satisfies the criteria stated in C.G.S. §16-50aa as follows:

A. **Technical Feasibility.** The replacement tower will be designed to support the proposed antenna installations as well as a second platform for another carrier's use. The site will allow Springwich to provide improved coverage to Interstate 95 and Route 1 and will help in alleviating call traffic blocking from Springwich's existing adjacent sites. In addition, Springwich engineers have determined that the proposed antenna installations present minimal potential for interference to or from existing radio transmissions from this or surrounding locations. The proposed shared use therefore is technically feasible.

B. **Legal Feasibility.** Springwich has entered into an arrangement with the property owner allowing the use of the property as proposed, and there are no restrictions on the property which would preclude such a use. Under the authority vested in the Council by C.G.S. §16-50aa, an order by the Council approving the shared use would permit Springwich to obtain a building permit for the proposed installation.

C. **Environmental Feasibility.** The proposed shared use would have a minimal environmental effect, for the following reasons:

1. The proposed installation would have a minimal visual impact, in that the replacement tower, including antennas, will be lower than the total height of the existing facility. Additionally, the replacement tower will not require any marking or lighting pursuant to FAA regulations.

After careful consideration by Springwich, a monopole tower was selected for this location. Springwich's decision to place such a tower at the site was based upon an analysis by the Maguire Group, Inc. of available structural information and measurements taken by their personnel at the site. Their analysis determined that the existing building could not support a replacement tower of sufficient strength for use by Springwich and the construction company. For this reason, a replacement of the rooftop guyed-lattice was not considered by Springwich.

A self-supporting lattice tower adjacent to the building was ruled out because it would provide a larger profile instead of the narrower profile of the proposed monopole.

A guyed-lattice tower on the ground was rejected because there is not enough land at this location to place guy-wires. Even if the land was available, the guys would interfere with the ingress and egress of construction vehicles to the garage and/or would interfere with employee parking.

2. The proposed installation would not increase the noise levels at the existing facility by six decibels or more. The only additional noise will be from additional heating and cooling equipment required for the Springwich equipment shelter.
3. Operation of the additional Springwich antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to a level at or above applicable ANSI standards. Worst-case general population/uncontrolled exposure calculations for a point at the base of the tower in relation to operation of each of Springwich's and the Laydon's proposed antennas:

	<u>Tx.Freq.</u> <u>(MHz)</u>	<u>Power</u> <u>(Watts)</u>	<u>Channels</u>	<u>Applicable</u> <u>ANSI Std.</u>	<u>Calculated Percentage</u> <u>"Worst case" MPE</u>	
Springwich (CL at 88 ft. AGL)	880-894	100	19	0.5867 mW/cm ²	0.1030 mW/cm ²	17.56
Laydon (CL at 93 ft. AGL)	43.12	100	1	0.2000 mW/cm ²	0.0052 mW/cm ²	2.60
Total						20.16

The collective worst-case general population/uncontrolled exposure would be 20.16 percent of the ANSI standard, as calculated for mixed frequency sites. Power density levels from shared use of the tower facility would thus be below applicable ANSI standards.

4. The proposed installation would not require any water or sanitary facilities, or generate discharges to water bodies. After construction is complete, the proposed installation would not generate any traffic other than for periodic maintenance visits.

For these reasons, the proposed shared use of this facility would not have a significant adverse environmental effect, and is therefore environmentally feasible.

E. **Economic Feasibility.** As previously mentioned, Springwich has entered into a mutually acceptable agreement with the property owner, and the financial arrangements for the site development described herein are acceptable to both parties. The proposed tower sharing is therefore economically feasible.

F. **Public Safety Concerns.** As stated above, the replacement tower will be structurally capable of supporting the proposed antennas. Springwich is not aware of any other public safety concerns relative to the proposed sharing of the existing tower. In fact, the provision of new or improved wireless communications service in the New Haven area, particularly in the Interstate 95 and Route 1 corridor and the residential, commercial, and industrial areas that would be served by the facility, through shared use of the existing tower, is expected to enhance the safety and welfare of area residents and travelers.

Conclusion

For the reasons discussed above, the proposed shared use of the tower facility at 69 Wheeler Street in New Haven satisfies the criteria stated in C.G.S. §16-50aa, and advances the State and Council's long standing goal of preventing the unnecessary proliferation of towers in Connecticut. Springwich therefore requests that the Council issue an order approving the proposed shared use.

Thank you for your consideration of this matter.

Very truly yours,



Attachments

cc: Mayor John DeStefano, Jr.
Phillip Bolduc, Zoning Director

** Transmit Conf. Report **

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