

Ronald C. Clark
Manager Real Estate Operations

TS- Nextel-023-990928
Nextel Communications
100 Corporate Place, Rocky Hill, CT 06067
860 883-2112 FAX 860 513-5444

NEXTEL

September 28, 1999

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

RECEIVED

SEP 28 1999

**CONNECTICUT
SITING COUNCIL**

Dear Chairman Gelston:


Pursuant to Connecticut General Statutes ("C.G.S.") § 16-50-aa, Nextel Communications, Inc. ("Nextel") respectfully proposes to install communications antennas on a new telecommunications tower currently being constructed at 14 Canton Springs Road in Canton, Connecticut. The Canton Volunteer Fire Company, Inc owns the facility. Other communications providers, including Bell Atlantic Mobile Communications and Springwiche Cellular Limited Partnership, will share the tower.

Nextel would prefer to share use of this facility rather than have the need to construct an additional tower in the area.

Nextel respectfully requests that the Council find the proposed shared use of the facility satisfies the criteria stated in C.G.S. § 16-50-aa and issue an order approving the shared use of this facility.

Thank you for your consideration in this matter.

Sincerely,



Ronald C. Clark
Manager Real Estate Operations

Attachments

CC: Honorable Kathleen C. Corkum, First Selectman
Town of Canton

TOWER SHARING
14 CANTON SPRINGS ROAD
CANTON, CONNECTICUT

BACKGROUND

Nextel Communications, Inc. is licensed by the Federal Communications Commission (FCC) to provide wireless communication services in the State of Connecticut, including the Town of Canton.

Nextel proposes to mount panel antennas on a new monopole (which is currently under construction) owned by the Canton Volunteer Fire Company, Inc. and located at 14 Canton Springs Road in Canton. The facility will be used by the Fire Company to provide two-way radio system coverage and will be shared with other wireless carriers, including Bell Atlantic Mobile Communications and Springwiche Cellular Limited Partnership.

The tower is situated at a ground elevation of 340-feet AMSL and located at the coordinates of 41°-49'-22" North / 72°-53'-45" West.

NEXTEL INSTALLATION

Nextel proposes to install twelve (12) ALP Model 9212 panel antennas center mounted at the 110-foot level of the 140-foot monopole (See Attachment A). A 10-foot by 20-foot pre-fabricated equipment shelter is to be placed at the base of the tower, abutting the existing equipment building (see Attachment B).

POWER DENSITY CALCULATIONS

The operation of Nextel's antennas will not increase the total radio frequency electromagnetic power density level measured at the base of the tower, to a point at, or even near, the State and Federal standard. "Worst case" calculations for a point at the tower base show the combined power density level for the Bell Atlantic, Springwiche, Fire Department and Nextel antennas is only 20.38% of the State/Federal standard for an uncontrolled environment:

<u>USER</u>	<u>STANDARD</u>	<u>"WORST-CASE" CALC.</u>	<u>% OF STD.</u>
BAM	0.583 mW/cm ²	0.0474 mW/cm ²	8.14
SPRWCH.	0.5867 mW/cm ²	0.0404 mW/cm ²	6.89
C.F.D.	0.0013 mW/cm ²	0.2 mW/cm ²	0.64
NEXTEL	0.56733 mW/cm ²	0.0267 mW/cm ²	4.71
TOTAL:			20.38%

OTHER RELEVANT INFORMATION

C.G.S. § 16-50-aa 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. § 16-50-aa(c)(1).)

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

- **Technical Feasibility.** The new monopole was designed, engineered and is being constructed to accommodate five (5) wireless carriers, plus the Fire Department. Nextel is the third carrier seeking to share use of the facility. The proposed-shared use of the tower is therefore technically feasible.
- **Legal Feasibility.** Under C.G.S. § 16-50-aa, the Council has been authorized to issue an order approving the proposed-shared use of an existing tower facility. (C.G.S. § 16-50-aa(c)(1).) This authority complements the Council’s prior-existing authority under C.G.S. § 16-50p to issue orders approving the construction of new towers that are subject to the Council’s jurisdiction. C.G.S. § 16-50x(a) directs the Council to “give such consideration to other state laws and municipal regulations as it shall deem appropriate” on ruling of requests for the shared use of existing tower facilities. Under the authority vested in the Council by C.G.S. § 16-50-aa, an order by the Council approving the shared use would permit the Nextel to obtain a building permit for the proposed installation.
- **Environmental Feasibility.** The proposed shared use would have a minimal environmental effect, for the following reasons:
 1. The proposed installation would have an insignificant incremental visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics in or around the area.
 2. The proposed installation would not increase the noise levels by six decibels or more at the site boundaries.
 3. Operation of the planned antennas (the Fire Department, Springwiche and Bell Atlantic) and proposed Nextel antennas would not exceed the total radio frequency electromagnetic radiation power density level Standard adopted by the State of Connecticut and the Federal Government. The “worst-case” exposure levels have been calculated for ground level and the combined power density levels for all users at the tower base is only 20.38% of the standard for an uncontrolled environment. As such, the facility would be operated in full and complete compliance with the Federal Telecommunications Act of 1996.

4. The proposed installation would not use water, require sanitary facilities, generate air emissions or cause discharges into water bodies. After construction is completed (approximately four weeks from start-to-finish), the facility would not generate any vehicular traffic other than from periodic maintenance visits by a Nextel service technician.

The proposed use of the facility would therefore have a minimal environment effect, and is environmentally feasible.

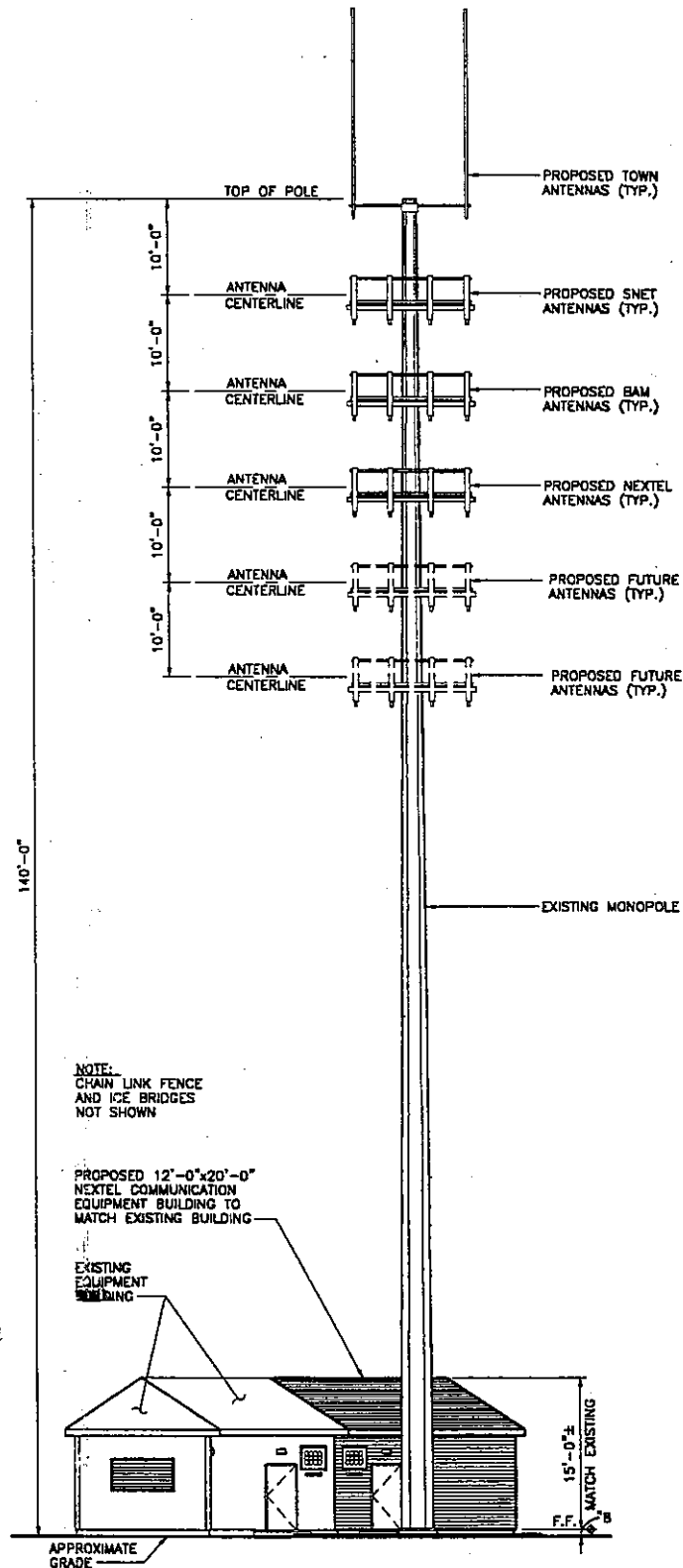
- **Economic Feasibility.** Nextel has entered into an Agreement to share use of the facility on mutually agreed upon terms. The proposed tower-sharing plan is therefore economically feasible.
- **Public Safety Concerns.** As stated previously, the tower is structurally capable of supporting the planned antennas and the proposed Nextel antennas and the combined radio frequency emission levels fall well below State/Federal Standards. Nextel is not aware of any other public safety issue(s) relative to the proposed sharing of the tower.

In reality, the provision of additional wireless system coverage can be expected to enhance the safety and security of local residents, as well as for those traveling through the area. The simple fact that *more than one-half million* wireless 911 calls were made in Connecticut during 1998 alone, attests to the positive impact wireless communications have had on public safety in the State. The safety related benefits of wireless service are further illustrated by the policy of many law enforcement officials here in Connecticut, and in other parts of the country, to make mobile telephones available to various resident groups, civic organizations, etc. to enhance/expand emergency communications and incident reporting capabilities. The proposed installation can likewise be expected to have a positive impact upon public safety and security in the Town of Canton.

CONCLUSION

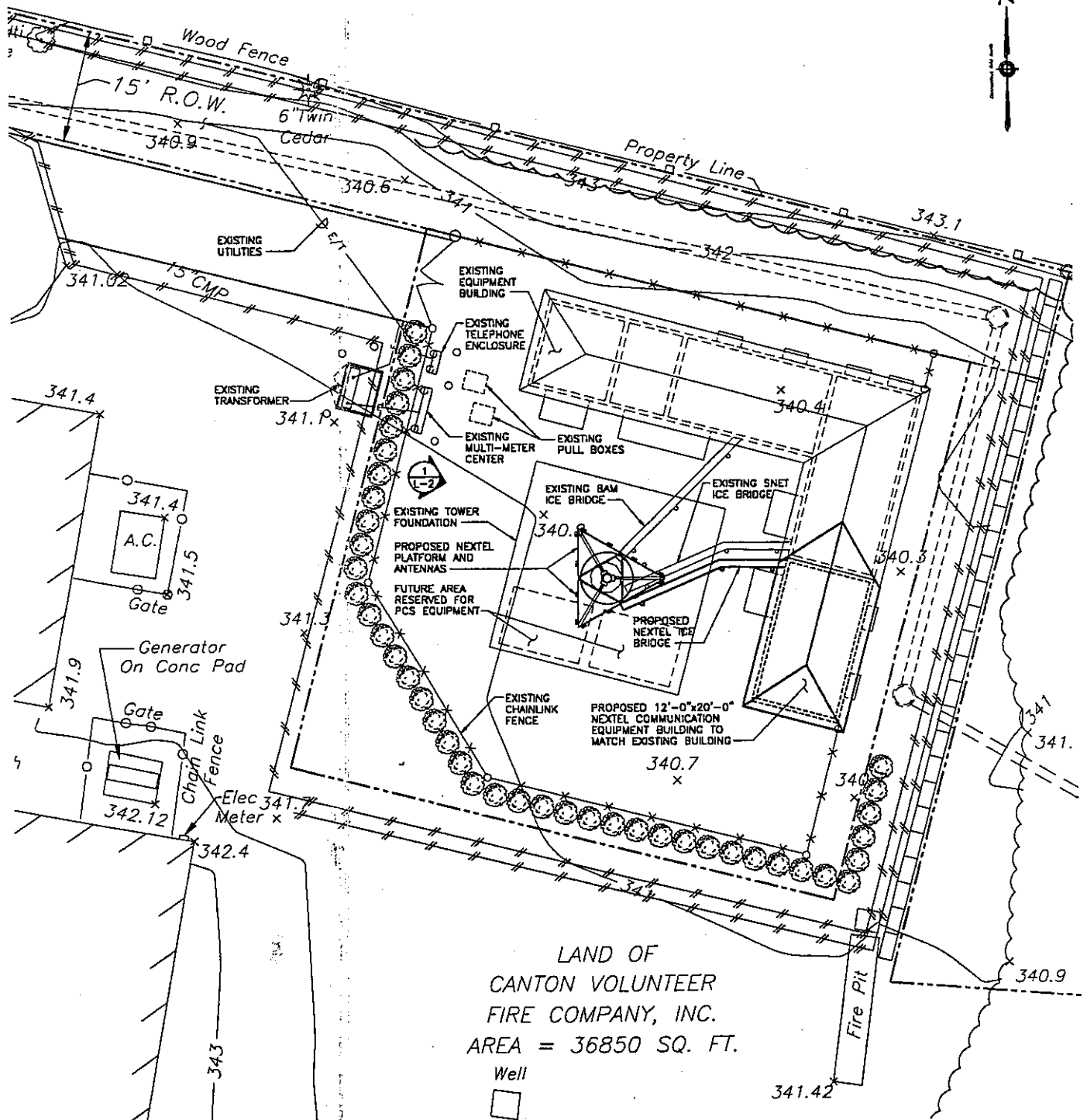
For the reasons discussed, the proposed shared use of this existing tower facility satisfies the criteria stated in C.G.S. § 16-50-aa, and advances the Connecticut General Assembly's and the Siting Council's objective of preventing the proliferation of towers in the State. Nextel therefore respectfully requests the Siting Council to issue an order approving the shared use of this facility.

ATTACHMENT A



1 TOWER ELEVATION
L-2 SCALE: 1" = 20'-0"

SITE ID NO: CT-0278	URS Greiner Woodward Clyde A-E-S	<h1 style="margin: 0;"><u>NEXTEL</u></h1>	Deg. No. <div style="border: 1px solid black; padding: 5px; font-size: 2em; font-weight: bold;">L-2</div>								
Designed by: Drawn by: CRS Checked by:	500 ENTERPRISE DRIVE ROCKY HILL, CONNECTICUT 1-(800)-529-8882	SITE ADDRESS: CANTON FIRE DEPARTMENT CANTON SPRINGS ROAD CANTON, CONNECTICUT	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; height: 40px;"> <div style="position: relative;"> <div style="position: absolute; top: 0; right: 0; font-size: 1.5em;">K-11</div> <div style="position: absolute; bottom: 0; right: 0; font-size: 1.2em;">8/22/99</div> </div> </td> <td style="width: 50%;"></td> </tr> <tr> <td style="font-size: 0.8em;">REV. DATE:</td> <td style="font-size: 0.8em;">DESCRIPTION</td> </tr> <tr> <td style="font-size: 0.8em;">Sealer AS NOTED</td> <td style="font-size: 0.8em;">Date: 08-27-99</td> </tr> <tr> <td style="font-size: 0.8em;">Job No.F301731.14</td> <td style="font-size: 0.8em;">File No.</td> </tr> </table>	<div style="position: relative;"> <div style="position: absolute; top: 0; right: 0; font-size: 1.5em;">K-11</div> <div style="position: absolute; bottom: 0; right: 0; font-size: 1.2em;">8/22/99</div> </div>		REV. DATE:	DESCRIPTION	Sealer AS NOTED	Date: 08-27-99	Job No.F301731.14	File No.
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REV. DATE:	DESCRIPTION										
Sealer AS NOTED	Date: 08-27-99										
Job No.F301731.14	File No.										



1 PARTIAL SITE PLAN
L-1 SCALE: 1" = 20'-0"

SITE ID NO:
CT-0278
Designed by:
Drawn by: CRS
Checked by:

URS Greiner Woodward Clyde
A-ES
500 ENTERPRISE DRIVE
ROCKY HILL, CONNECTICUT
1-(800)-529-8882

SITE ADDRESS:

CANTON FIRE DEPARTMENT
CANTON SPRINGS ROAD
CANTON, CONNECTICUT

NEXTEL

REV.	DATE	DESCRIPTION
Scale:	AS NOTED	Date: 08-27-99
Job No.	F301731.14	File No.

Dwg. No.

L-1

Dwg. 1 of 2



Canton
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