

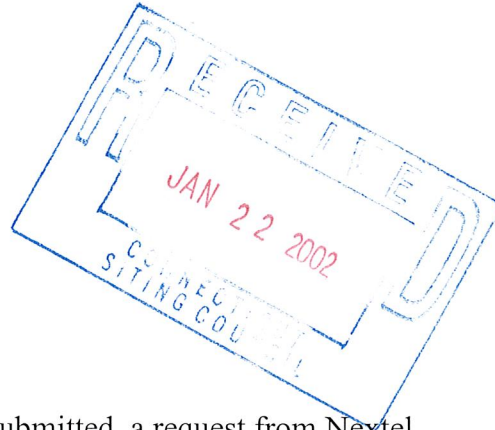
Nextel Communications

100 Corporate Place, Rocky Hill, CT 06067
860 513-5400 FAX 860 513-5444



January 18, 2002

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



Dear Chairman Gelston:

Please find enclosed and respectfully submitted, a request from Nextel Communications Inc. ("Nextel") to Modify an Exempt Tower and Associated Equipment at an existing telecommunications facility located at 107 Buck Road in Hebron, Connecticut. This facility is owned and Managed by Sprint Sites USA and is currently used by Sprint PCS to provide wireless coverage.

Nextel wishes to share use of this facility in order to improve/expand wireless its system coverage and to avoid the possibility of constructing another telecommunications tower in the general area.

The attached information details how the addition of the proposed antennas and associated equipment at the tower site meet the criteria set forth in Section 16-50j-72(b)(2) of the Regulations of Connecticut State Agencies and therefore is an Exempt Modification pursuant to Section 16-50j-73 of the Regulation.

Thank you for your consideration in this matter.

Respectfully,

A handwritten signature in dark ink, appearing to read "Ronald C. Clark", is written over a light-colored background.

EM-NEXTEL-067-020122

Ronald C. Clark
Manager Real Estate Operations

Enclosure

Cc: Mr. Randall Peteros, Chairman
Town of Hebron

**EXEMPT MODIFICATION
107 BUCK ROAD
HEBRON, CONNECTICUT 06248**

Pursuant to Section 16-50i(a)(5) of the Connecticut General Statutes and Section 16-50j-72(b)(2), as amended, of the Regulations of Connecticut State Agencies, Nextel Communications Inc., (“Nextel”) hereby notifies the Connecticut Siting Council of its intent to modify an existing telecommunications facility located at 107 Buck Road in Hebron, Connecticut.

BACKGROUND

This existing facility, located at 107 Buck Road in Hebron, Connecticut consists of a 120-foot tall monotree\monopole that is owned and managed by Sprint Sites USA. The tower is currently used by Sprint PCS to provide Personal Communications Service coverage to this section of Hebron along State Route 66.

Nextel desires to share use of this facility and thus avoid the potential need to construct an additional tower in the general area.

DISCUSSION

Nextel plans to install twelve (12) panel antennas center-lined at the 107-foot level of the monopine tower (see Attachment A) and place a 12-foot by 20-foot equipment shelter inside the eastern side of the existing fenced compound (see Attachment B). The tower has been structurally analyzed and found to be fully capable of supporting Nextel’s antennas and its tower mounted hardware (see Attachment C).

POWER DENSITY INFORMATION

The operation of Nextel’s antennas will not increase the total radio frequency electromagnetic power density level to a level at (or even near) existing State and Federal Standards. “Worst case” calculations, measured to a point at the base of the tower, show the combined power levels for the existing Sprint and proposed Nextel antennas reach just 26.9003% of the State/Federal standard in an uncontrolled access environment. (See Attachment D).

CONCLUSION

The proposed additions do not constitute a “modification” of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and are consistent with the exception criteria found in Section 16-50j-72(b)(2) of the Regulations of Connecticut State Agencies in that the addition of Nextel’s antennas and equipment will not increase the existing tower height or extend the boundaries of the site; will not increase noise levels by six (6) decibels or more at the site’s boundaries; and will not increase the total radio frequency electromagnetic radiation above the Standard set forth in Section 22(a)–162 of the Connecticut General Statutes. In summary, this proposed addition would not have a substantial adverse environmental effect.

For the reasons discussed above, Nextel respectfully requests that the Council acknowledge that this Notice of Modification meets the Council’s exemption criteria, and permit Nextel to share use of this facility.

ATTACHMENT A

T/EXIST MONOTREE

PROPOSED NEXTEL ANTENNA PLATFORM

PROPOSED NEXTEL SECTOR ANTENNA (TYP OF 12)

☉ NEXTEL ANTENNAS

PROPOSED NEXTEL ANTENNA CABLES ROUTED INSIDE MONOPOLE

EXIST 120' MONOTREE

PROPOSED NEXTEL GPS ANTENNA (TYP 3)

PROPOSED 12'X20' NEXTEL EQUIPMENT SHELTER

PROPOSED NEXTEL CABLE BRIDGE

EXIST METER BOARD & TELCO DEMARK

EXIST 6' HIGH CHAINLINK FENCE

EXIST GRADE

107'

120'

1 ELEVATION
SC-1 SCALE: 1" = 10'

EXIST MONOTREE FOUNDATION

SHEET 1 OF 2

TECTONIC/KEYES ASSOCIATES

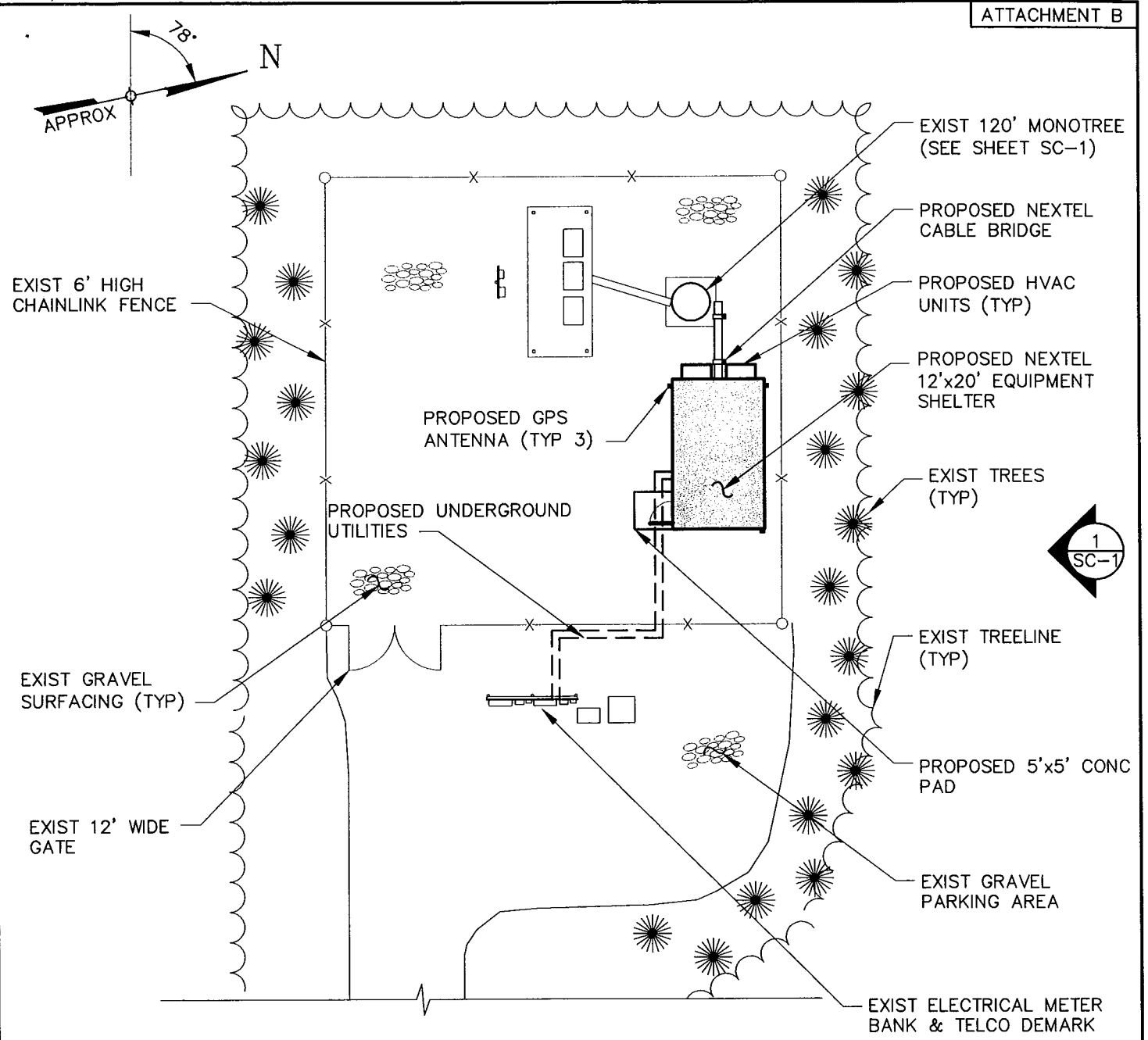
1344 SILAS DEANE HIGHWAY, SUITE 500
ROCKY HILL, CT 06067
(860) 563-2341 FAX(860) 257-4882

NEXTEL

HEBRON (CT-0047)
107 BUCK ROAD
HEBRON, CT 06428

ISSUED BY: <i>[Signature]</i>	W.O. 2993.0047	10/19/01	SITING COUNCIL	SC-1
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ATTACHMENT B



1 SITE DETAIL PLAN
 SC-2 SCALE: 1" = 20'

SHEET 2 OF 2

TECTONIC/KEYES ASSOCIATES
 1344 SILAS DEANE HIGHWAY, SUITE 500
 ROCKY HILL, CT 06067
 (860) 563-2341 FAX(860) 257-4882

NEXTEL
 HEBRON (CT-0047)
 107 BUCK ROAD
 HEBRON, CT 06428

ISSUED BY: <i>[Signature]</i>	W.O. 2993.0047	10/19/01	SITING COUNCIL	SC-2
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ATTACHMENT C

Rick Neller
Nextel of the Mid-Atlantic, Inc.
dba Nextel Communications
100 Corporate Place
Rocky Hill, CT 06067

November 7, 2001

**RE: W.O. 2993.0047
SITE NO. CT-0047
EXISTING "PINE TREE" MONOPOLE
BUCK ROAD
HEBRON, CT
STRUCTURAL CAPACITY**

Dear Mr. Neller:

It is our understanding that Nextel is proposing to install panel antennas on the existing pine tree disguised monopole at the above referenced site. Tectonic Engineering Consultants, P.C. has performed a limited inspection of the structure and a review of its design for its suitability to support the proposed antennas based on the following information:

- "120'-0" Pine Tree Pole; Sprint PCS/NJ" structure design drawing, by Engineering Endeavors, Inc. for site: South Hebron, CT33XC560, Tolland County, CT, dwg. no. GS52783, dated 10/20/00 (2 sheets).
- "Sprint PCS, 120' Pine Tree Pole, South Hebron, CT33XC560, Tolland County, CT" foundation design drawing, by Engineering Endeavors, Inc., project no. 8058, dwg. no. S8058-120, dated 10/20/00.
- Structure Design Calculations for 120' 3 Carrier Pine Disguised Design, by Engineering Endeavors, Inc. for site: South Hebron/Ellis Property, EEI job no. 8058-E01, dated 10/18/00 (9 pages).
- "Design Calculations for a Spread Footer Foundation, Sprint PCS, 120' Pine Tree Pole", by Engineering Endeavors, Inc., site: South Hebron, CT33XC560 Cellular Site, EEI project no. 8058, dated 10/19/00 (5 pages).
- "Tower Loading Form", by Sprint, cascade no. CT33XC560, file no. 8058-e01, dated 4/4/01.

The existing pole has a total height of 120', and consists of three (3) slip-jointed sections. Each section is covered in synthetic bark for its full height.

W.O. 2993.0047
Nextel / Hebron
Structural Capacity

Page 2

November 7, 2001

According to the drawings, the foundation consists of a 28'-0" square by 3'-0" thick reinforced concrete footing, bearing at a depth of 5'-0" below grade. A 6'-6" square pier extends from the footing to approximately 6" above grade.

The original design was based on ANSI/EIA/TIA-222-F-1996 using a basic wind speed of 90 mph with no ice, and a reduced wind speed of 78 mph in conjunction with 0.5" radial ice. The structure was designed to support the following items:

- 12 DAPA 48000 directional antennas on a Universal T-Arm Array at the 117'-6" level
- 12 DAPA 48000 directional antennas on a Universal T-Arm Array at the 107'-6" level
- 12 DAPA 48000 directional antennas on a Universal T-Arm Array at the 97'-6" level
- Synthetic pine limbs from the 75' level to the top

The original design criteria also included an Operational (50 mph) wind load case, which limited the sway of the pole. This was not the controlling loading case.

At the time of our inspection, the structure appeared to be supporting nine (9) Sprint panel antennas on T-arms, just below the top. It is our understanding that these are Decibel DB980H90 antennas. A full set of pine limbs appears to be present.

We understand that Nextel is proposing to install a total of twelve (12) panel antennas on a sectorized platform or T-arms at the 107' level. Additionally, we understand that Sprint may install one (1) GPS antenna at the 75' level at a future date.

In accordance with the provisions of ANSI/TIA/EIA-222-F-1996 "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures" and the 1999 Connecticut Supplement to the BOCA National Building Code/1996, a basic wind speed of 85 mph applies to Tolland County, CT, where the pole is located. We note that the wind speed used in the original design exceeds this requirement.

We have not inspected the structure in detail, and therefore assume that the pole and its foundation were built in accordance with the manufacturer's drawings and specifications, and that the structure is in "like-new" condition.

The existing Sprint and proposed Nextel installations are smaller than the typical antenna configurations listed in the original design.

We have not performed a detailed structural analysis of the pole or any specific calculations for the effect of the proposed installation. However, based on a comparison with the original design, it is clear that the pole and its foundation have

W.O. 2993.0047
Nextel / Hebron
Structural Capacity

Page 3


November 7, 2001

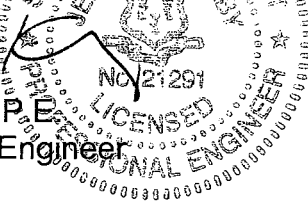
adequate capacity to support this installation in accordance with current applicable codes.

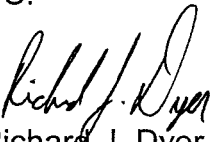
Please contact me if you require any further information.

Sincerely,

TECTONIC ENGINEERING CONSULTANTS, P.C.


Jeffrey B. Kirby, P.E.
Chief Structural Engineer




Richard J. Dyer, E.I.T.
Staff Structural Engineer

cc: J. Fuller / Tectonic
P. Carbone / Tectonic

G:\StrTower\2993 (Nextel)\0047\Hebron-StrCap

ATTACHMENT D

Hebron, CT (Buck Road) - CT Siting Council Power Density Calculations

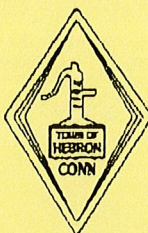
Nextel Directional Antennas ESMR - 851 MHz at centerline 107' AGL

							Note: Power densities are in mW/ cm ²	
Transmitters:	Frequency in MHz	CT Standard mW/ cm ²	Number of Channels	ERP (W) per channel	Centerline of TX antennas AGL (ft.)	Power density calculated at base of tower	% of CT Standard	
Sprint	1962	1.0000	11	471.63	117	0.136207323	13.6207%	
Nextel Digital ESMR - Proposed	851	0.5673	24	100	107	0.075339331	13.2796%	

Total % of CT Standard **26.9003%**

Nextel - 107 Buck Road, Hebron - 01/25/02





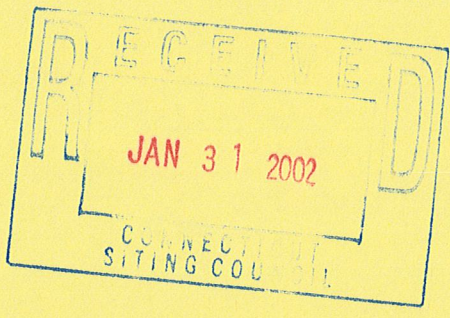
TOWN OF HEBRON

15 Gilead Street, Hebron, CT 06248
TEL (860) 228-5971 FAX (860) 228-5980

Planning/Zoning Building Health Conservation

January 31, 2002

S. Derek Phelps
Executive Director
Connecticut Siting Council
State of Connecticut
Two Franklin Square
New Britain, CT 06051



Re: EM - Nextel - 067-020122 - Nextel Communications, Inc. notice of intent to modify an existing telecommunications facility located at 107 Buck Road, Hebron, Connecticut

Dear Mr. Phelps:

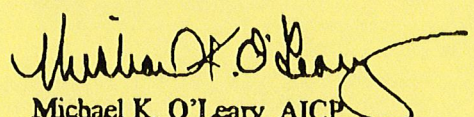
Thank you for your letter of January 23, 2002 concerning the above-referenced matter and for the opportunity for the Town to provide written comments.

As you are probably aware, the Town of Hebron Planning and Zoning Commission approved the existing facility on Buck Road. Due to its proximity to a residential neighborhood, the Commission required that the tower be constructed using camouflage techniques. Accordingly, the facility is a "monopine" tower resembling a pine tree. All antennas are located within an array of synthetic pine limbs.

Upon a review of the January 18, 2002 letter from Ronald C. Clark of Nextel Communications, it appears that the applicant plans will be fully compatible with the Commission's approval. Accordingly, the Town has no objection to this application. The Town would only request that any approval by the Siting Council requires the installation to be fully compatible with the existing monopine facility and that all antennas will be located within the existing synthetic pine limbs.

Thank you again for allowing us the opportunity to provide this input.

Very truly yours,


Michael K. O'Leary, AICP
Town Planner for the Town of Hebron

MKO/dmg

cc: Robert E. Lee, Town Manager
Planning and Zoning Commission

PZC/PZC-Ld/EM-Nextel



Town of Hebron

15 GILEAD STREET
HEBRON, CONNECTICUT 06248
TEL (860) 228-5971
FAX (860) 228-5980

- PLANNING/ZONING
- BUILDING
- HEALTH
- INLAND - WETLANDS

DATE: 1/31/02

FROM: MICHAEL O'LEARY, TOWN PLANNER

SUBJECT: NEXTEL APPLICATION

COMMENTS: PLEASE SUBMIT ATTACHED
LETTER FOR THE RECORD.

TO: BOB MERCIER

AT: CT SITING COUNCIL

FAX #: _____

Number of Pages, including cover sheet: 2