

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL-

Ten Franklin Square New Britain, Connecticut 06051 Phone: (860) 827-2935 Fax: (860) 827-2950

July 18, 2002

Thomas F. Flynn III Nextel Communications Inc. 100 Corporate Place Rocky Hill, CT 06067

RE: **EM-NEXTEL-077-020604** - Nextel Communications Inc. notice of intent to modify an existing telecommunications facility located at 53 Slater Road, Manchester, Connecticut.

Dear Mr. Flynn:

At a public meeting held on July 11, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that the equipment shelter be painted tan to conform to the original conditions of approval stipulated by the Town of Manchester.

The proposed modifications are to be implemented as specified here and in your notices dated May 28, 2002, and July 9, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very flyry your

Chairman

MAG/DM/laf

c: Honorable Stephen T. Cassano, Mayor, Town of Manchester Thomas R. O'Marra, Zoning Enforcement Officer, Town of Manchester Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae Michele G. Briggs, SNET Mobility LLC

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

NEXTEL

May 28, 2002

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

JUN - 4 2002

CONNECTICUT SITING COUNCIL

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 on 53 Slater Road, Manchester, Connecticut. This facility is located on property owned by Raglin Associates LLC. The facility is owned and operated 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.

Thomas F. Flynn III

Zoning Manager

Nextel Communications

EM-Nextel-077-020604

Enclosure

Cc: Honorable, Stephen Cussano, Mayor

Town of Manchester

EXEMPT MODIFICATION 53 SLATER ROAD MANCHESTER, CONNECTICUT 06040

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 53 Slater Road in Manchester, Connecticut.

BACKGROUND

This existing facility, located at 53 Slater Road in Manchester, Connecticut consists of a 155-foot tall monopole that is owned by Sprint PCs on property owned by Raglin Associates LLC. The tower is currently used by Sprint PCS to provide wireless service to this section of Manchester and along Route I-84 in the vicinity of the Buckland Hills Mall.

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 123-foot level of the tower (see Attachment A) and place a 12-foot by 20-foot equipment shelter inside the southwestern corner 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 (Attachment C).

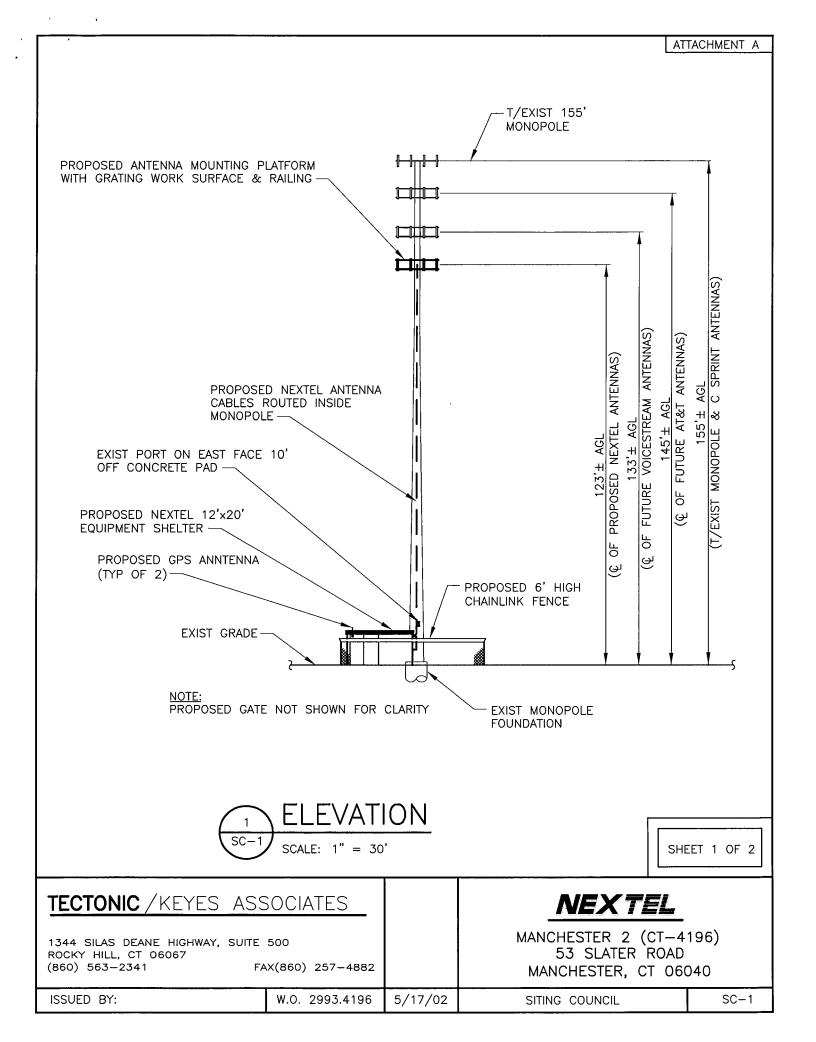
POWER DENSITY INFORMATION

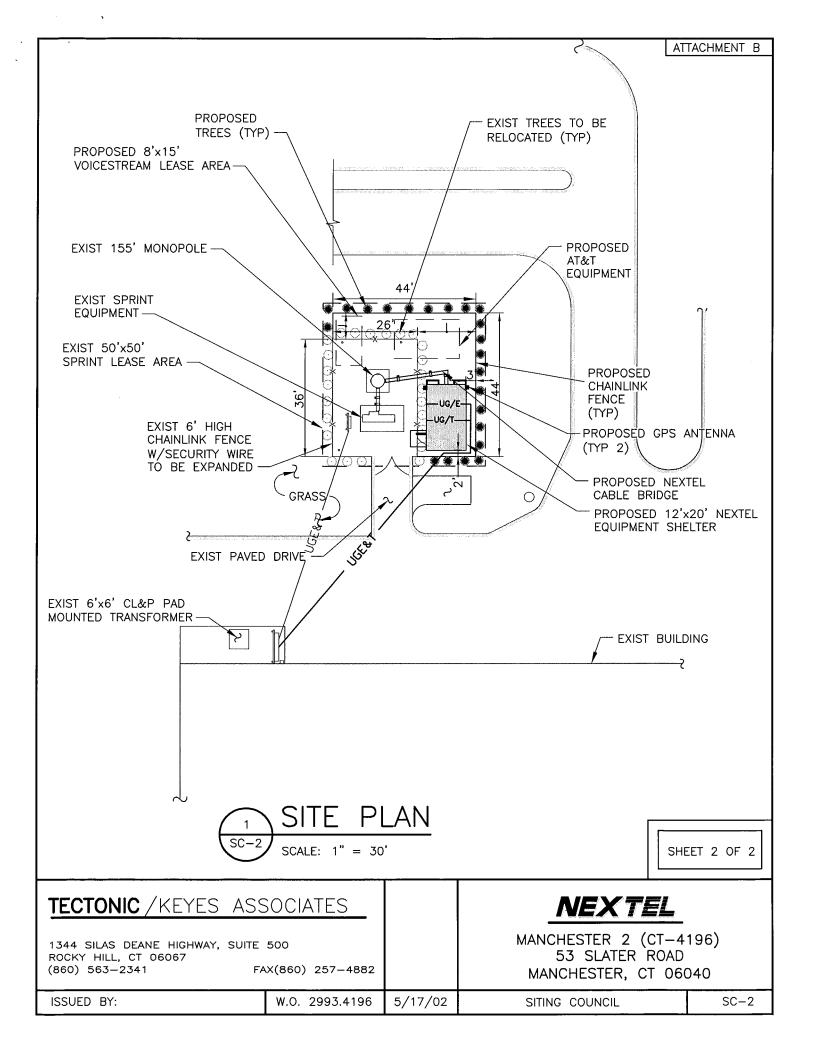
The operation of Nextel's antennas will not increase the total radio frequency electromagnetic power density level to a level at (or even near) existing State and Federal Standards. "Worst case" calculations, measured to a point at the base of the tower, show the combined power levels for the existing Sprint and proposed Nextel antennas reach just 5.41 % 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.





TO BE PROVIDED

ATTACHMENT C

Manchester, CT (Slater Rd.) - CT Siting Council Power Density Calculations	ouncil Power	Density Calculo	ations				
Nextel Directional Antennas ESMR - 851 MHz at centerline 85' AGL	centerline 85' AG	<u> </u>					
						Note: Power den:	Note: Power densities are in mW/ cm²
			Number of	ERP (W)	Centerline of	Power density	
Transmitters:	Frequency	CT Standard	Channels	per channel	Tx antennas	calculated at	% of CT Standard
	in MHz	mW/ cm²			AGL (ft.)	base of tower	
Sprint	1962	1.0000	=	100	155	0.016455359	1.6455%
Nextel Digital ESMR - Proposed	851	0.5673	9	100	123	0.021380131	3.77%
Total % of CT Standard							5.41%

Nextel Communications

100 Corporate Place, 1st Floor, Rocky Hill, CT 06067 860 513-5400 FAX 860 513-5444

SPONNE CTICUT

NEXTEL

July 9, 2002

David Martin Connecticut Siting Council 10 Franklin Square New Britain, CT. 06051

Re:

EM-Nextel -077-020604

Dear Mr. Martin,

Enclosed please find an original and 25 copies of the structural report for the above referenced site. Thank you for your patience in this matter .

Very truly yours,

Thomas F. Flynn III

Zoning Manager

Nextel Communications Inc.

1047 N. 204th Avenue Elkhorn, NE 68022 Ph: 402-289-1888 Fax: 402-289-1861

SEMAAN ENGINEERING SOLUTIONS

155 ft SUMMIT Monopole Structural Analysis

Prepared for: Sprint Sites USA 535 East Crescent Ave Ramsey, NJ 07446

JUL -9 2002 CONNECTICUT SITING COUNCIL

0K/0/8/02

Site: CT03XC211 Nextel Manchester, CT

June 10, 2002

Mr. Russ Van Oudenaren Sprint Sites USA 535 East Crescent Ave Ramsey, NJ 07446

Re: Site Number CT03XC211 - Manchester, CT.

Dear Mr. Van Oudenaren:

We have completed the structural analysis for the existing monopole, located at the above referenced site. The purpose of this analysis is to determine that the existing monopole design is in conformance with the EIA/TIA-222-F standard and local building codes for the proposed antennae loads installation. Refer to the Review and Recommendations section at the end of this report for the analysis results.

Description of Structure:

The structure is a 155 ft SUMMIT Monopole.

Refer to SUMMIT job #3960 dated September 11, 1998 for a detailed description of the structure.

Method of analysis:

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. It also treats guys as exact cable elements and therefore is ideal for guyed towers. The analysis was performed in conformance with EIA/TIA-222-F and local building codes for 80 mph with 1/2" radial ice. Wind is applied to the structure, accessories and antennas.

Structure loading:

Per the loading sheet supplied, the analysis was performed using the following loading: (Proposed loading in bold)

Elev. (ft)	Qty.	Antennas and Mounts	Coax	Owner
155.0	9	DB980H90 Mounted On a 14 FT Low Profile platform	(9) 1-5/8	Sprint
145.0	6	Allgon 7250.03 Mounted On a 14 FT Low Profile platform	(12) 1-5/8	AT&T
133.0	6	RR90-17-02DP Mounted On a 14 FT Low Profile platform	(12) 1-5/8	VoiceStream
123.0	12	DB844H90EE Mounted On a 14 FT Low Profile platform	(12) 1-5/8	Nextel

All new access holes shall be reinforced with welded rims that are compatible with the pole and to be sized and supplied by pole manufacturer.

All transmission lines are assumed running inside of pole shaft.

Results of Analysis:

Refer to the attached Computer Summary sheets for detailed analysis results.

Structure:

The existing monopole is structurally capable of supporting the existing and proposed antennas.

The maximum structure usage is: 60.8%.

Foundation:

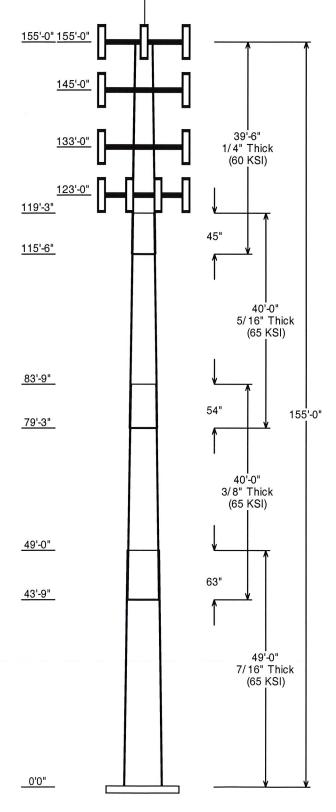
Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	3,250.00	2,080.88	64.0
Shear (kips)	28.00	19.20	68.6

The structure base reactions resulting from this analysis do not exceed the ones shown on the original structure drawings.

Review and Recommendations:

Based on the analysis results, the existing structure meets the requirements per the EIA/TIA-222-F standards for a basic wind speed of 80 mph with 1/2" radial ice.

Copyright Semaan Engineering Solutions, Inc



Job Information

Pole: CT03XC211

Description:

Client : Sprint Sites USA - NJ

Location: Manchester, CT

Type: 18 Sides Slip Joints

Height :(ft) 155.000 Taper: 0.1850 (in/ft)

	Sections Properties								
Shaft Section	Section Length (ft)		eter (in) ss Flats Bottom	Thick (in)	Joint Type	Overlap Length (in)	Steel Grade (ksi)		
1	49.000	39.73	48.80	0.438		0.000	65		
2	40.000	34.05	41.45	0.375	Slip Joint	63.000	65		
3	40.000	28.11	35.51	0.313	Slip Joint	54.000	65		
4	39.500	22.00	29.30	0.250	Slip Joint	45.000	60		

	Discrete Appurtenance						
Attach Elev (ft)	Force Elev (ft)	Туре	Qty	Description			
155.000	159.000	Lightning	1	5/8" lightning rod			
155.000	155.000	Platform	1	14 FT Low Profile platform			
155.000	155.000	Panel	9	DB980H90			
145.000	145.000	Platform	1	14 FT Low Profile platform			
145.000	145.000	Panel	6	Allgon 7250.03			
133.000	133.000	Platform	1	14 FT Low Profile platform			
133.000	133.000	Panel	6	RR90-17-02DP			
123.000	123.000	Platform	1	14 FT Low Profile platform			
123.000	123.000	Panel	12	DB844H90EE			

	Load Cases / Def	lections	
L O	Attach	Translation	Rotation
Load Case	Elev (ft)	(in)	(deg)
No Ice	No Ice Wind Speed = 80.00	0 mph w/ No Ice	
	155.000	76.49	-4.128
	145.000	67.88	-4.100
	133.000	57.70	-3.984
	123.000	49.53	-3.806
<u>lce</u>	Ice Wind Speed = 69.28 mg	h w/ Ice 0.50 in T	<u>hick</u>
	155.000	63.83	-3.462
	145.000	56.60	-3.438
	133.000	48.07	-3.338
	123.000	41.23	-3.185

	React	tions	
	Moment	Shear	Axial
Load Case	(Kip-ft)	(Kips)	(Kips)
No Ice	2,080.877	19.197	-28.785
Ice	1,712.715	15.391	-36.144





Town of Manchester

41 Center Street • P.O. Box 191

Manchester, Connecticut 06045–0191

www.ci.manchester.ct.us

STEPHEN T. CASSANO, MAYOR JOSH M. HOWROYD, DEPUTY MAYOR CHRISTY SCOTT, SECRETARY

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KEVIN L. ZINGLER

June 10, 2002

Mr. S. Derek Phelps, Executive Director Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

Re: EM-NEXTEL—077-020604 – Nextel Communications, Inc.

53 Slater Street, Manchester, Connecticut

Dear Mr. Phelps:

On behalf of the Town of Manchester thank you for the referral of the subject request. The site at 53 Slater Street was originally approved in anticipation that communications providers would co-locate on the monopole and this proposal appears to be in accordance with that approval. However, at the time of approval, a requirement or condition of approval was that all equipment boxes and structures be painted tan. It would be appreciated if the Council would call this requirement to the attention to the applicant.

If you have any questions please do not hesitate to get in touch with me at 860-647-3057. My facsimile number is 860-647-3144.

Very truly yours,

Thomas R. O'Marra

Zoning Enforcement Officer

TRO'M/s

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cc: Steven R. Werbner, General Manager

Mark Pellegrini, Director of Neighborhood Services and Economic Development





STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

June 5, 2002

Honorable Stephen T. Cassano Mayor Town of Manchester Town Hall 41 Center Street P. O. Box 191 Manchester, CT 06040-0191

RE:

EM-NEXTEL-077-020604 - Nextel Communications Inc. notice of intent to modify an existing telecommunications facility located at 53 Slater Road, Manchester, Connecticut.

Dear Mr. Cassano:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for June 25, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Thomas R. O'Marra, Zoning Enforcement Officer, Town of Manchester Richard J. Sartor, General Manager, Town of Manchester