



March 7, 2005

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

www.ct.gov/csc

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

RE: **EM-NEXTEL-033-050131** – Nextel Communications Inc. notice of intent to modify an existing telecommunications facility located at 201 Main Street, Cromwell, Connecticut.

Dear Mr. Flynn:

At a public meeting held on March 3, 2005, 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 that condition that the baseplate is reinforced per the recommendation on page 3 of the structural analysis report.

The proposed modifications are to be implemented as specified here and in your notice dated January 31, 2005, and additional information received February 9, 2005, including the placement of all necessary equipment and shelters within the tower compound. 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 truly yours,

Pamela B. Katz, P.E.
Chairman

PBK/laf

- c: The Honorable Stanley A. Terry, Jr., First Selectman, Town of Cromwell
- Frederic Curtin, Zoning Enforcement Officer, Town of Cromwell
- Christopher B. Fisher, Esq., Cuddy & Feder LLP
- Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
- Kenneth C. Baldwin, Esq., Robinson & Cole LLP

Perrone, Michael

From: Flynn, Tom-Contractor [Tom.Flynn@Nextel.com]
Sent: Wednesday, February 09, 2005 2:06 PM
To: Perrone, Michael
Subject: NEXTEL EXEMPT MOD. APPLICATION CROMWELL

Mike,

This will confirm our conversation of this morning where you advised me of a potential typographical error on Nextel's Exempt Modification Application dated January 31, 2005 for a site located at 201 Main Street, Cromwell, CT. You were correct there is an error in the text. The text should indicate a Nextel height on the tower of 95' rather than 137'

Thank you for pointing the discrepancy out to me.

Tom Flynn
860-513-5458

RECEIVED
FEB 09 2005
CONNECTICUT
SITING COUNCIL

RECEIVED
JAN 31 2005
CONNECTICUT
SITING COUNCIL

January 25, 2005

Ms. Pamela Katz, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Dear Chairman Katz:

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 201 Main Street, Cromwell, Connecticut. The tower is owned by Sprint PCS.

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 Coordinator
Nextel Communications

Enclosure

Cc: First Selectman

**EXEMPT MODIFICATION
201 MAIN STREET
CROMWELL, CONNECTICUT**

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 201 Main Street, Cromwell, Connecticut.

BACKGROUND

This existing facility, located at 201 Main Street, Cromwell , Connecticut consists of a 125-foot tall monopole that is owned by Sprint PCS and is located on property of S & S Partners Inc. Sprint PCS, Verizon and AT&T Wireless are currently using the site. The site will provide wireless service coverage for Nextel to this section of Cromwell, Middletown and Routes 8, 373, 66 and 17.

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 137-foot level of the tower (see Attachment A) and place a 12-foot by 20-foot equipment shelter inside the northeastern 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 (Attachment C). The tower is located at latitude 41 38 00 and longitude 72 38 58.

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 power levels for the existing Sprint PCS, AT&T Wireless, Verizon and the proposed Nextel antennas reach just 9.6871 % 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.

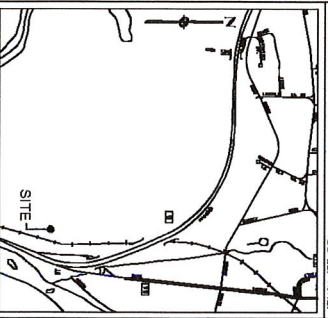
For the reasons discussed above, Nextel respectfully requests that the Council acknowledge that this Notice of Modification meets the Council’s exemption criteria, and permit Nextel to share use of this facility.

NEXTEL COMMUNICATIONS OF THE MID-ATLANTIC INC

DBA NEXTEL COMMUNICATIONS CT-2976A CROMWELL SOUTH

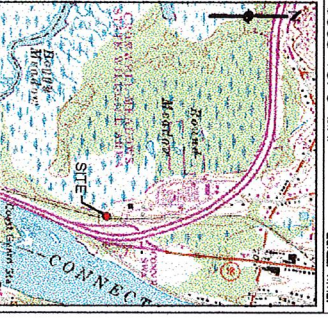
ACT FILE
NEXTEL
 755 BROOK STREET BLDG 5
 ROCKY HILL, CONNECTICUT
 06867-5858

LOCATION MAP SCALE: N.T.S.



SITE DIRECTIONS
 FROM MAINE, 1-31 SOUTH TOWARD NEW HAVEN AVENUE DRIVE CT-4
 APPROX. 1/2 MILE TO CT-297A OF CT-297A OF CT-297A OF CT-297A OF CT-297A
 CT-297 (WEST STREET) AND TURN RIGHT DRIVE CT-297/MAIN STREET

USGS TOPO MAP SCALE: N.T.S.



CODE REFERENCES
 BUILDING CODE: COMMERCIAL STATE BUILDING CODE
 ZONING ORDINANCE: ZONING ORDINANCE
 CONSTRUCTION REGULATIONS: CONSTRUCTION REGULATIONS
 ELECTRICAL CODE: NATIONAL ELECTRICAL CODE
 FIRE CODE: NATIONAL FIRE ALARMS CODE
 CONSTRUCTION REGULATIONS: CONSTRUCTION REGULATIONS

PROJECT INDEX

SITE NUMBER:	CT-297A
SITE NAME:	CROMWELL SOUTH
SITE ADDRESS:	201 MAIN STREET CROMWELL, CT 06418
APPLICANT:	NEXTEL COMMUNICATIONS DBA NEXTEL COMMUNICATIONS ROCKY HILL, CT 06867
PROJECT OWNER:	2 AND 3 PARTNER, INC.
SITE CONTACT:	AMBER SILVER (860) 434-0024
DESCRIPTION:	COMMERCIAL MAP # LOT: ZONING DISTRICT: USGS MAP: COUNTY: LATITUDE: LONGITUDE: SQUARE FOOTAGE: SQUARE METERS:

PROJECT CONTACTS
 PROJECT MANAGER:
 PROJECT ENGINEER:
 PROJECT ARCHITECT:
 PROJECT ELECTRICAL ENGINEER:
 PROJECT MECHANICAL ENGINEER:
 PROJECT PLUMBING ENGINEER:
 PROJECT CIVIL ENGINEER:
 PROJECT LANDSCAPE ARCHITECT:
 PROJECT SURVEYOR:
 PROJECT INSURANCE BROKER:
 PROJECT LEGAL COUNSEL:
 PROJECT FINANCIAL ADVISOR:
 PROJECT TITLE INSURANCE COMPANY:
 PROJECT RECORDS DEPARTMENT:
 PROJECT ARCHIVE DEPARTMENT:
 PROJECT DOCUMENTS DEPARTMENT:
 PROJECT INFORMATION DEPARTMENT:
 PROJECT SUPPORT DEPARTMENT:
 PROJECT TRAINING DEPARTMENT:
 PROJECT DEVELOPMENT DEPARTMENT:
 PROJECT OPERATIONS DEPARTMENT:
 PROJECT MAINTENANCE DEPARTMENT:
 PROJECT REPAIR DEPARTMENT:
 PROJECT REPLACEMENT DEPARTMENT:
 PROJECT RENOVATION DEPARTMENT:
 PROJECT RESTORATION DEPARTMENT:
 PROJECT REPAIR DEPARTMENT:
 PROJECT REPLACEMENT DEPARTMENT:
 PROJECT RENOVATION DEPARTMENT:
 PROJECT RESTORATION DEPARTMENT:

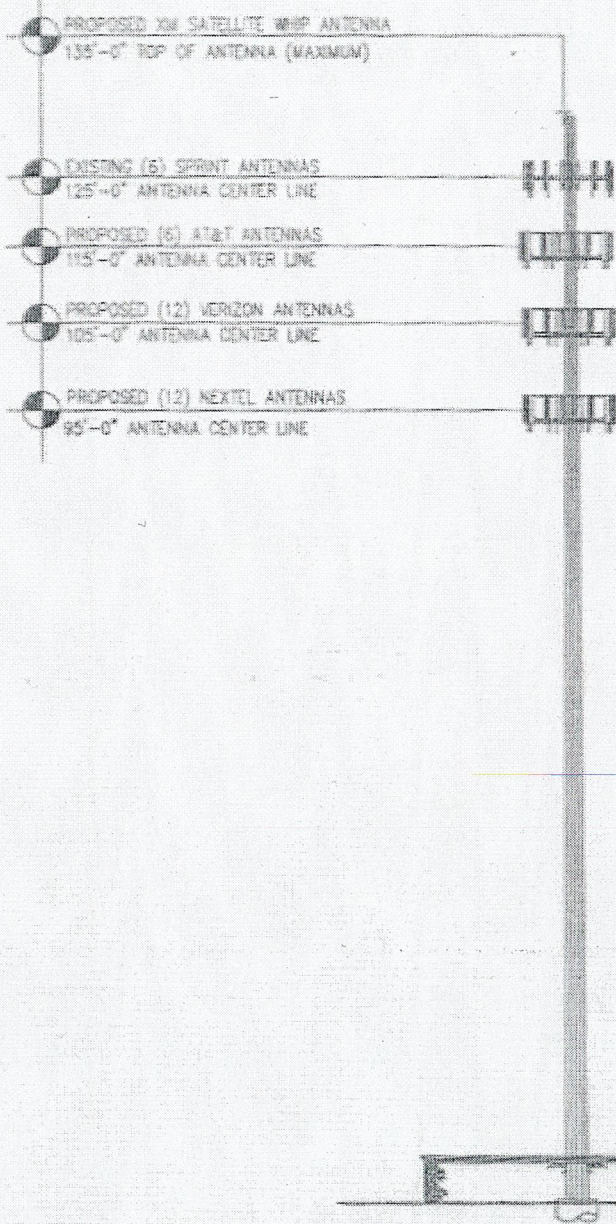
SHEET INDEX

NO.	DESCRIPTION	REV.	NO.	REVISION	DATE
1-1	TITLE SHEET- GENERAL NOTES AND LEGEND	A	1	11.24.04	
2-1	COMPOUND PLAN WORKSPACE EXAMINED AND DENIED	A	1	11.24.04	

APPROVALS

NAME	DATE
OWNER	
PROJECT ENGINEER	
PROJECT SUBMITTER	
PROJECT THE ACQUISITION	
PROJECT FIELD OPERATIONS	
GENERAL FINANCING	

TITLE SHEET - GENERAL NOTES AND LEGEND

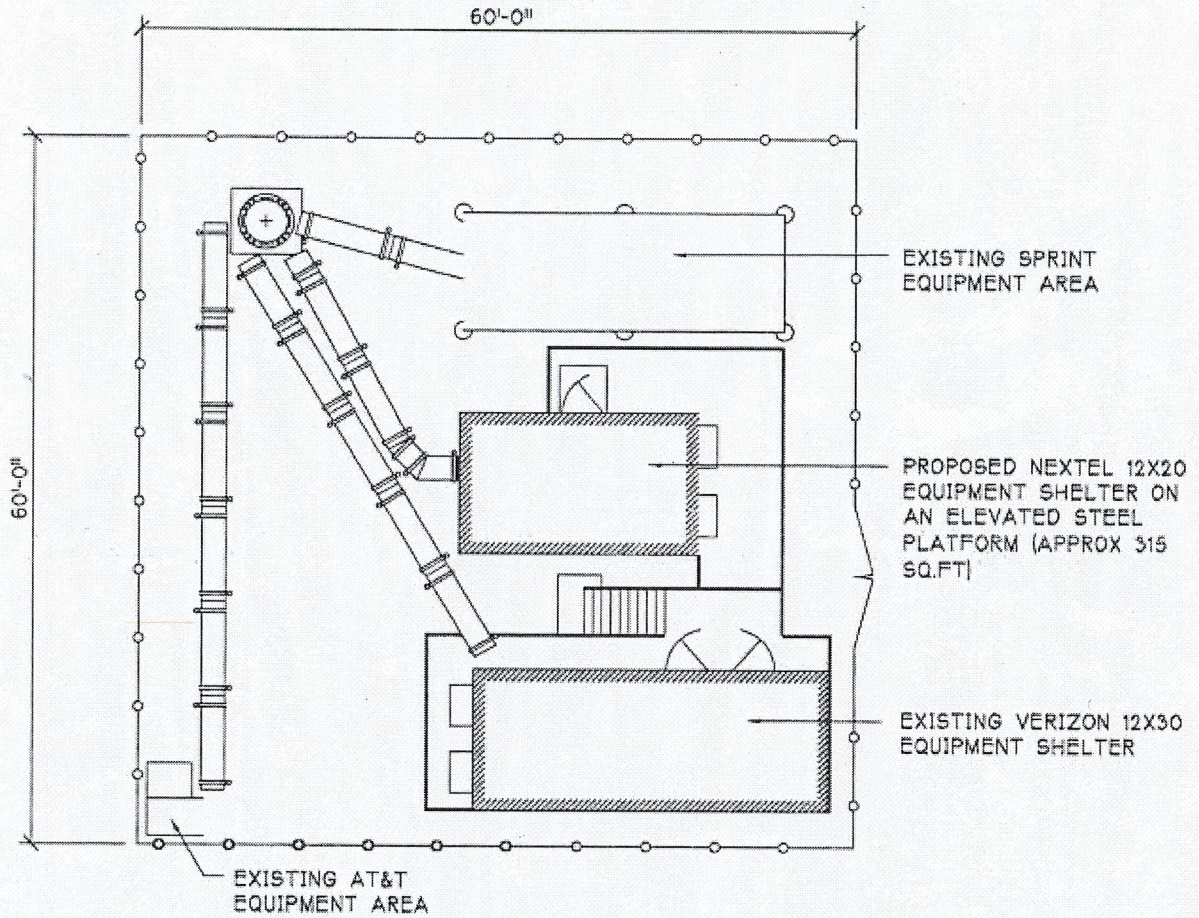


(6) PROPOSED ATT ALLCOX 7250 ANTENNAS MOUNTED ON T-ARMS AT 115' ACL WITH 12 1/4" COAX CABLE ROUTED INSIDE THE MONOPOLE

ELEVATION
SCALE: NOT TO SCALE

RE A.S. 01/21/05
 Conf'd K/Hankus
 CONF. DPT 11/21/05
 CPS R/H 11/21/05

PROJECT: FIRST LINE EMERGENCY SERVICES ADDRESS: 201 MAIN STREET CHENWELL, CT CLIENT REF: CT23YCS58		 		Approved by: IWP ENGINEER: _____ DATE: _____ Approved by: IWP MANAGER: _____ DATE: _____ Approved by: SQUIB DIRECTOR: _____ DATE: _____ Approved by: CLIENT: _____ DATE: _____	
Drawing No: ELEVATION	IWP: MJS IWP: RSO DATE: 10/3/01				



FINAL

○ SITE LAYOUT
SCALE: 3/32"=1'-0"

Handwritten notes:
 JPT-1/21/05
 O/S - KH 11/20/05
 RF M.B. 01/29/05
 CONST. JPT. 1/20/05
 JSC 1/20/05

CT 2976

Project: FIRST LINE EMERGENCY SERVICES Address: 201 MAIN STREET CROMWELL, CT Coscode No.: CT23XC558		Client: NEXTEL Sprint Sites USA		Approved By: _____ DATE: _____ IMP ENGINEER:	
				Approved By: _____ DATE: _____ IMP MANAGER:	
Drawing Name: SITE LAYOUT		IMP. MANAGER: MJo		IMP. ENGINEER: ACo	

EXHIBIT B

1079 N. 204th Avenue
Elkhorn, NE 68022
Ph: 402-289-1888
Fax: 402-289-1861

SEMAAN ENGINEERING SOLUTIONS

**125 ft EEI Monopole
Structural Analysis**

**Prepared for:
Sprint Sites USA
1 International Blvd
Mahwah, NJ 07645**

**Site: CT23XC558
Verizon
Cromwell, CT**

December 2, 2004

Ms. Kim Cornelisse
Sprint Sites USA
1 International Blvd
Mahwah, NJ 07645

Re: Site Number CT23XC558 – Cromwell, CT.

Dear Ms. Cornelisse:

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 125 ft EEI Monopole.

Refer to EEI drawing GS52064 dated February 22, 2000 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. The analysis was performed in conformance with **EIA/TIA-222-F and local building codes for a basic wind speed of 85 mph and 1/2" radial ice with reduced wind speed.** 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
125.0	9	DB980H65 On a EEI 10'8" Low Profile platform	(9) 1-5/8	Sprint
	3	DB980H90 On the same EEI 10'8" Low Profile platform	(3) 1-5/8	
115.0	6	Allgon 7250 On a Low Profile platform	(12) 1-1/4	AT&T
105.0	12	DB844 On a Low Profile platform	(12) 1-5/8	Verizon
95.0	12	DB844H65(E)-XY On a Low Profile platform	(15) 1-1/4	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 not structurally capable of supporting the existing and proposed antennas. The baseplate is overstressed and will require stiffeners. The maximum structure usage is: 92.4% (shaft) approx. 136.0% (baseplate)

Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	1,575.10	1,774.60	112.7
Shear (kips)	17.30	19.51	112.8

The reactions calculated from the analysis slightly exceed the ones indicated on the original structural design. However, upon reviewing the foundation documents, they were found to be adequate and therefore the foundation will not require modification.

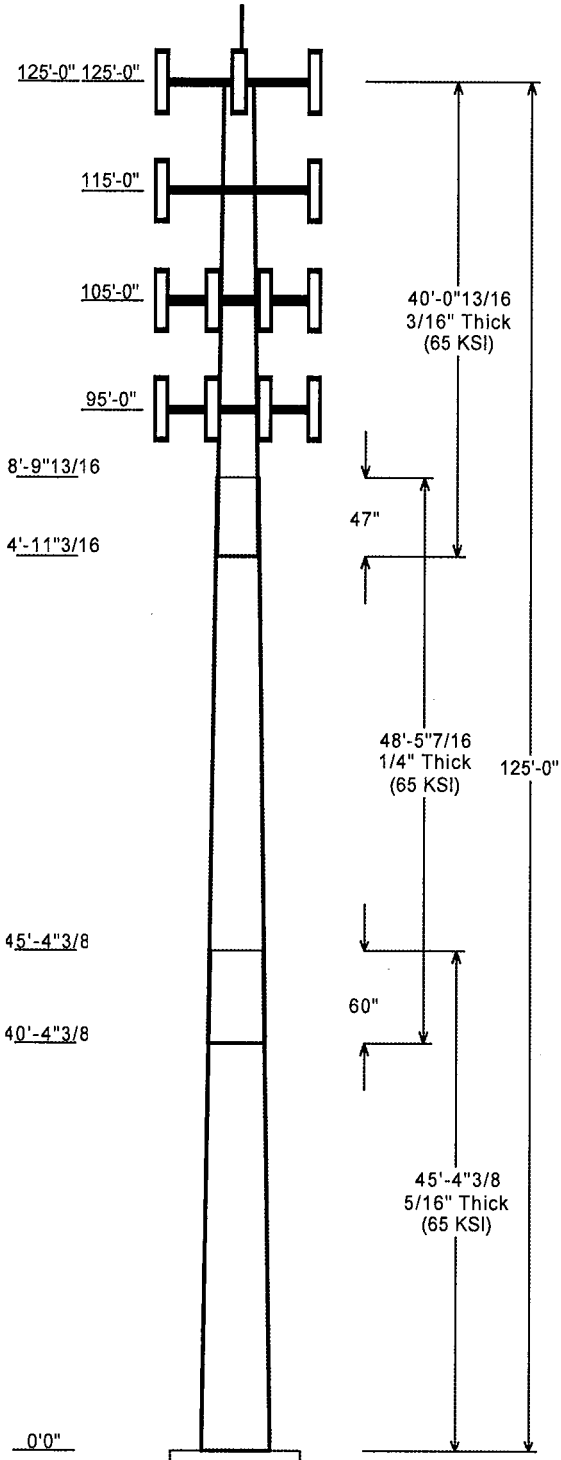
Review and Recommendations:

Based on the analysis results, the existing structure does not meet the requirements per the EIA/TIA-222-F standards for a basic wind speed of 85 mph and 1/2" radial ice with reduced wind speed. The baseplate is overstressed and will require stiffeners.

SEMAAN ENGINEERING SOLUTIONS

1079 N.204th Avenue
 Elkhorn, NE 68022
 Phone: 402-289-1888
 Fax: 402-289-1861

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Job Information	
Pole :	CT23XC558
Description :	
Client :	Sprint Sites USA - NJ
Location :	Cromwell, CT
Type :	18 Sides
Base Elev (ft):	0.00
Height (ft)	125.00
Taper:	0.213000 (in/ft)

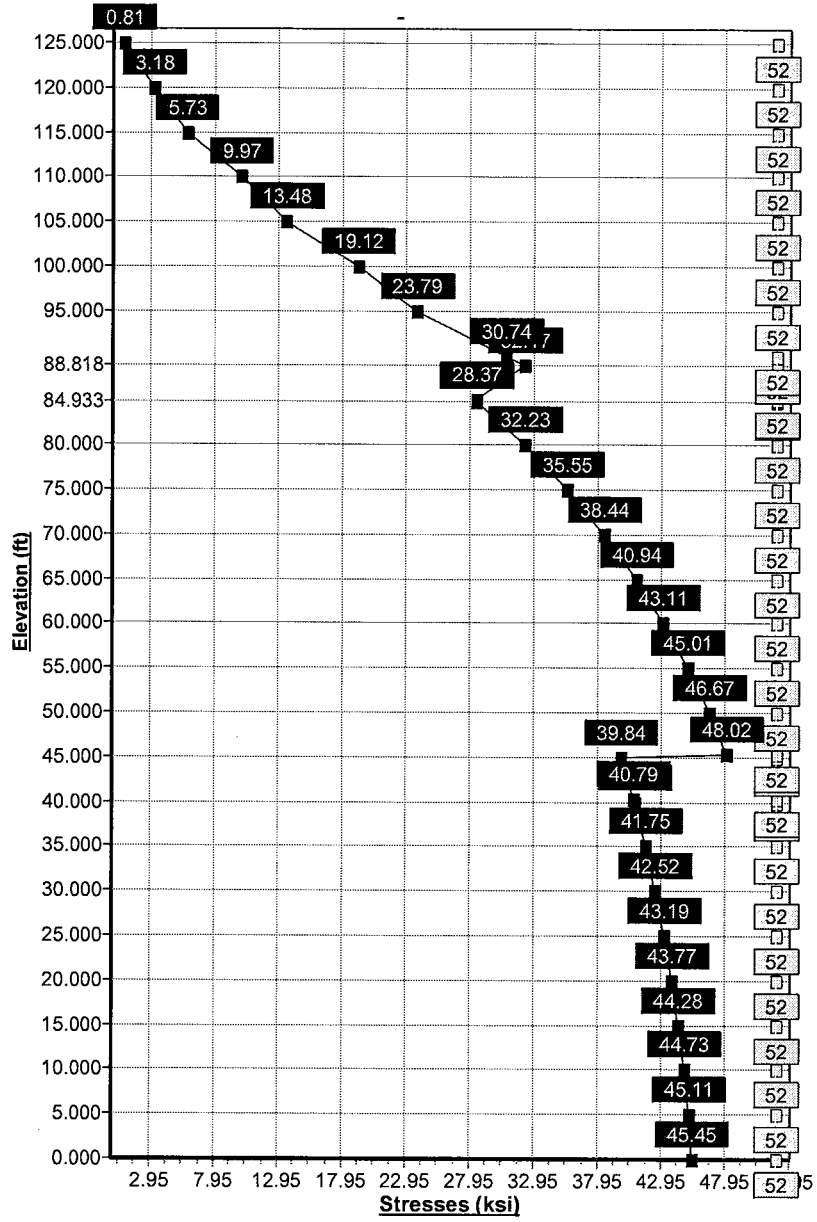
Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap		Steel Grade (ksi)
		Across Top	Flats Bottom			Length (in)	Taper (in/ft)	
1	45.364	34.58	44.25	0.313		0.000	0.213000	65
2	48.456	25.83	36.15	0.250	Slip Joint	60.023	0.213000	65
3	40.067	18.50	27.03	0.188	Slip Joint	46.625	0.213000	65

Discrete Appurtenance					
Attach Elev (ft)	Force Elev (ft)	Type	Qty	Description	
125.000	125.000	Panel	3	DB980H90	
125.000	125.000	Panel	9	DB980H65	
125.000	127.500	Lightning	1	Lightning Rod, 5'	
125.000	125.000	Platform	1	EEI 10'8" Low Profile platform	
115.000	115.000	Platform	1	Low Profile platform	
115.000	115.000	Panel	6	Allgon 7250	
105.000	105.000	Platform	1	Low Profile platform	
105.000	105.000	Panel	12	DB844	
95.000	95.000	Platform	1	Low Profile platform	
95.000	95.000	Panel	12	DB844H65(E)-XY	

Load Cases / Deflections			
Load Case	Attach Elev (ft)	Translation (in)	Rotation (deg)
No Ice <u>No Ice Wind Speed = 85.00 mph w/ No Ice</u>			
	125.000	80.89	-5.462
	115.000	69.51	-5.398
	105.000	58.39	-5.208
	95.000	47.82	-4.868
Ice <u>Ice Wind Speed = 73.61 mph w/ Ice 0.50 in Thick</u>			
	125.000	74.41	-5.024
	115.000	63.94	-4.964
	105.000	53.71	-4.789
	95.000	43.98	-4.483

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	1,774.604	19.510	-17.800
Ice	1,614.765	17.149	-24.696

Load Case : No Ice



Cromwell, CT (200 Main St.) - CT Siting Council Power Density Calculations

Nextel Directional Antennas ESMR - 851 MHz at centerline 95' 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 (from AT&T filing)	1962	1.0000	11	100	122			
AT&T from AT&T filing)	1945	1.0000	16	100	115			
Verizon (from AT&T filing)	880	0.5867	20	250	105		0.0900%	
Total MPE from AT&T filing								
Nextel Digital ESMR - Proposed	851	0.5673	12	100	89	0.054447671	9.5971%	
** Nextel antenna centerline is 95' adjusted to 89' per OET 65 Bulletin for 6' average head height.								
Total % of CT Standard							9.6871%	