

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@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

December 11, 2007

Thomas J. Regan, Esq.
Brown Rudnick Berlack Israels LLP
185 Asylum Street, CityPlace I
Hartford, CT 06103-3402

RE: **EM-SPRINT-NEXTEL-034b-071120** - Sprint Nextel Corporation notice of intent to modify an existing telecommunications facility located at 48 Newtown Road, Danbury, Connecticut.

Dear Attorney Regan:

At a public meeting held on November 29, 2007, 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.

The proposed modifications are to be implemented as specified here and in your notice dated November 20, 2007, 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. Please be advised that the validity of this action shall expire one year from the date of this letter. 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,


Daniel F. Caruso
Chairman

DFC/MP/laf

c: The Honorable Mark D. Boughton, Mayor, City of Danbury
Dennis Elpern, City Planner, City of Danbury
48 Newtown Corporation



CONNECTICUT SITING COUNCIL
Affirmative Action / Equal Opportunity Employer

CONNECTICUT SITING COUNCIL

In re:

Sprint Nextel Corporation's Notice to Make an Exempt Modification to an Existing Facility at 48 Newtown Road, Danbury, Connecticut.

EXEMPT MODIFICATION NO. :
November 20, 2007

RECEIVED
NOV 20 2007

CONNECTICUT SITING COUNCIL

NOTICE OF EXEMPT MODIFICATION

Pursuant to Conn. Agencies Regs. §§ 16-50j-73 and 16-50j-72(b), Sprint Nextel Corporation ("Sprint") hereby gives notice to the Connecticut Siting Council ("Council") and the City of Danbury of Sprint's intent to make an exempt modification to an existing monopole (the "Tower") located at 48 Newtown Road in Danbury, Connecticut. Specifically, Sprint plans to remove twelve existing iDEN network antennas and replace them with six new iDEN antennas, three WiMAX antennas and one microwave dish antenna. Under the Council's regulations (Conn. Agencies Regs. § 16-50j-72(b)), Sprint's plans do not constitute a modification subject to the Council's review because Sprint will not change the height of the Tower, will not extend the boundaries of the compound, will not increase the noise levels at the site, and will not increase the total radio frequency electromagnetic radiation power density at the site to levels above applicable standards.

Sprint is currently undertaking an upgrade to its wireless communications system in Connecticut. As part of the upgrade, Sprint is implementing WiMAX technology to enable enhanced wireless data communications. In order to accomplish the upgrade at this site, Sprint plans to add three WiMAX antennas and install additional WiMAX-related electronic equipment at the base of the Tower.

The Tower is a 100-foot monopole located at 48 Newtown Road in Danbury, Connecticut (latitude 41° 24' 12" N, longitude 73° 25' 27" W). The Tower is owned by 48 Newtown Road Corporation. Verizon and Cingular also have antennas located on the Tower. Currently, Sprint has twelve iDEN antennas spread over three sectors with an antenna centerline at 78 feet. Sprint's equipment cabinets are located at the base of the Tower within an existing equipment building. A site plan with the Tower specifications is attached.¹

Sprint plans to remove all twelve of its existing Decibel DB844H90E-XY (iDEN) antennas. Sprint will then install six Andrew RR-90-11-00DBL (iDEN) antennas, three KMW AM-X-WM-17-65-00T (WiMAX) antennas (each with one KMW RET unit and one KMW TMA attached), and one Andrew VHLP2-23-2WH microwave dish (2 feet in diameter). Inside the monopole will be six coaxial cables 1-5/8" in diameter, and two coaxial cables 1/2" in diameter. The new antennas will have the same antenna centerline as the old antennas – 78 feet. To analyze whether the Tower can support these changes, Sprint commissioned URS Corporation ("URS") to perform a structural analysis of the Tower. The Executive Summary of URS's "Detailed Structural Analysis and Evaluation of an Existing 96' Monopole Tower and its Foundation for New Antenna Arrangement" dated November 16, 2007 is attached.

Sprint will also install a WiMAX radio cabinet inside its existing shelter at the base of the Tower and a global positioning antenna (GPS) on the existing equipment building. Therefore, no increase in the size of the compound will be necessary. Furthermore, excluding brief, minor, construction-related noise during the removal and replacement of the antennas and the

¹ Please note that the site plan incorrectly states the address as 45 Newtown Road, the correct address is 48 Newtown Road.


installation of the equipment cabinet, Sprint's changes to the Tower will not increase the noise levels at the site.

The addition of the new iDEN antennas, WiMAX antennas and microwave dish will not adversely impact the health and safety of the surrounding community or the people working on the Tower. The total radio frequency exposure measured around the Tower will be well below the National Council on Radiation Protection and Measurements' ("NCRP") standard adopted by the Federal Communications Commission ("FCC"). The worst-case power density analysis for the WiMAX antennas, measured at the base of the Tower, indicates that the WiMAX antennas will emit 9.96% of the NCRP's standard for maximum permissible exposure, the new iDEN antennas will emit 12.49% of the maximum permissible exposure and the microwave dish, 0.05%. A cumulative power density analysis indicates that together, all of the antennas on the Tower will emit only 55.41% of the NCRP's standard for maximum permissible exposure. Therefore, the power density levels will be well below the FCC mandated radio frequency exposure limits in all locations around the Tower, even with extremely conservative assumptions. The power density analysis is attached.

In conclusion, Sprint's proposed plan to remove twelve existing iDEN antennas and replace them with three WiMAX antennas, six new iDEN antennas and one microwave dish, as well as the installation of the WiMAX associated equipment, does not constitute a modification subject to the Council's jurisdiction because Sprint will not increase the height of the Tower, will not extend the boundaries of the site, will not increase the noise levels at the site, and the total radio frequency electromagnetic radiation power density will stay within all applicable standards.

See Conn. Agencies Regs. § 16-50j-72.

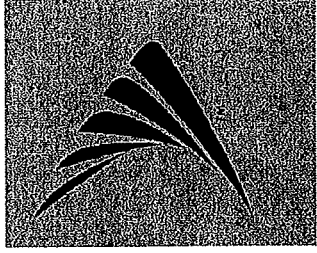
Sprint Nextel Corporation

By:  _____

Thomas J. Regan
Brown Rudnick Berlack Israels LLP
185 Asylum Street, CityPlace I
Hartford, CT 06103-3402
Email - tregan@brownrudnick.com
Phone - 860.509.6522
Fax - 860.509.6622

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Sprint Nextel Corp.



DANBURY SOUTH

CT01YC128/NCT1053

45 NEWTOWN ROAD

DANBURY, CT 06105

Sprint Nextel Corp.
1 INTERNATIONAL BLVD.,
SUITE 800
MAHWAH, NJ 07495

TRANSCEND WIRELESS, LLC
479 ROUTE 17 NORTH,
2ND FLOOR
MAHWAH, NJ 07430

A&E FIRM

URS CORPORATION AES
500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CONNECTICUT
1-(860)-529-8882

NO.	DATE	REVISIONS	BY	CHK/APP'D
1	11/07/07	SITING COUNCIL	JES PJS/AA	
2	11/07/07	REVIEW	KAP PJS/AA	
3				
4				
5				
6				
7				
8				
9				
10				

NOT TO SCALE | DESIGNED BY: PJS | DRAWN BY: KAP
A&E SEAL



DANBURY SOUTH
CT01YC128/NCT1053
45 NEWTOWN ROAD
DANBURY, CT 06105

PROJECT NO.

TW1-019
56917279

DRAWING NAME

T-1

DATE

11/01/07

SHEET NO.

1 OF 3

REV

0

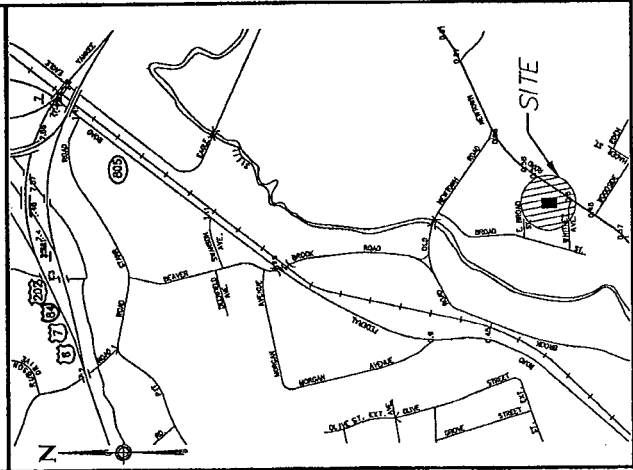
SHEET INDEX

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET - GENERAL NOTES AND LEGENDS
SC-1	ROOF PLAN
SC-2	TOWER ELEVATION

DRIVING DIRECTIONS

FROM 100 CORPORATE PLACE, ROCKY HILL, CT:
Start out going SOUTH on CORPORATE PL toward WEST ST. 0.1 miles
Turn LEFT onto WEST ST. <0.1 miles
Merge onto I-84 S toward NEW HAVEN. 9.1 miles
Merge onto I-891 W via EXIT 18 toward MERIDEN / WATERBURY. 7.9 miles
Merge onto I-84 W via EXIT 1 on the LEFT toward WATERBURY / DANBURY. 32.1 miles
Take EXIT 8 toward NEWTOWN RD / BETHEL. 0.2 miles
Turn SLIGHT RIGHT onto US-6 W. 0.1 miles
Stay STRAIGHT to go onto NEWTOWN RD. 1.1 miles
End at 45 Newton Road, Danbury, CT 06810-6235, US
Total Est. Time: 54 minutes Total Est. Distance: 50.89 miles

PROJECT INDEX



PROJECT INDEX

SITE NUMBER:	CT01YC128/NCT1053
SITE NAME:	DANBURY SOUTH
SITE ADDRESS:	45 NEWTOWN ROAD DANBURY, CT 06105
APPLICANT:	SPRINT NEXTEL CORP. 1 INTERNATIONAL BLVD, SUITE 800 MAHWAH, NJ 07495
CONTACT:	JASON DEBERT (347) 284-8617
PROPERTY OWNER:	46 NEWTOWN ROAD CORPORATION 50 NEWTOWN ROAD DANBURY, CT 06108
JURISDICTION:	CONNECTICUT SITING COUNCIL
LATITUDE:	41°-24'-12"
LONGITUDE:	73°-25'-27"



Sprint Nextel Corp.
 1 INTERNATIONAL BLVD.,
 SUITE 800
 MAHWAH, NJ 07485

TRANSCEND WIRELESS, LLC
 479 ROUTE 17 NORTH,
 2ND FLOOR
 MAHWAH, NJ 07480

A&E FIRM

URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3B
 ROCKY HILL, CONNECTICUT
 1-(860)-529-8882

NO.	DATE	REVISIONS	BY	CHK/APP'D
1	11/07/07	SITING COUNCIL	JES PJS AA	
2	11/01/07	REVIEW	KAP PJS AA	
NOT TO SCALE DESIGNED BY: PJS DRAWN BY: KAP				

A&E SEAL

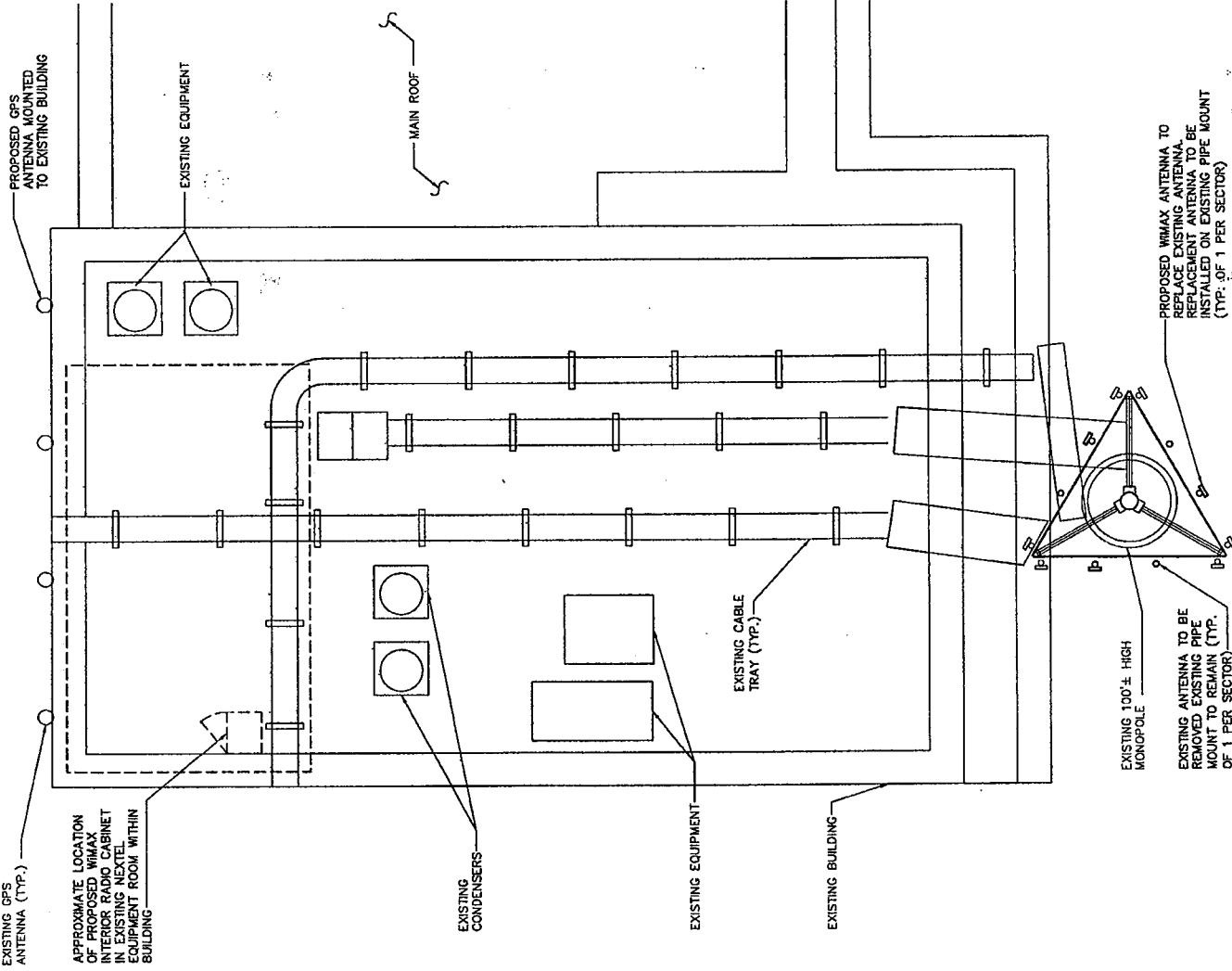
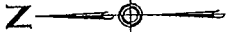


DANBURY SOUTH

CT01YC128/NCT1053

45 NEWTOWN ROAD
 DANBURY, CT 06105

PROJECT NO.	DRAWING NAME	DATE	SHEET NO.	REV
TW1-019	SC-1	11/01/07	2 OF 3	0
36917279				



1 ROOF PLAN
 SCALE: 1" = 10'-0"

Sprint Nextel Corp.
 1 INTERNATIONAL BLVD.,
 SUITE 800
 MAHWAH, NJ 07495

TRANSCEND WIRELESS, LLC
 479 ROUTE 17 NORTH,
 2ND FLOOR
 MAHWAH, NJ 07430

A&E FIRM

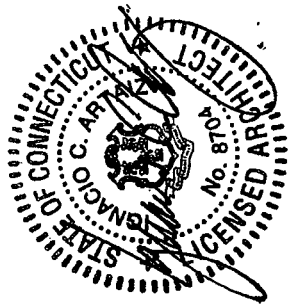
URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3B
 ROCKY HILL, CONNECTICUT
 1-(860)-529-8882

NO.	DATE	REVISIONS	BY
A	11/07/07	STRING COUNCIL	JES/PJS/AA
Δ	11/07/07	REVIEW	KAP/PJS/AA
			BT/CHK/KAP/PD

NOT TO SCALE DESIGNED BY: PJS DRAWN BY: KAP

A&E SEAL



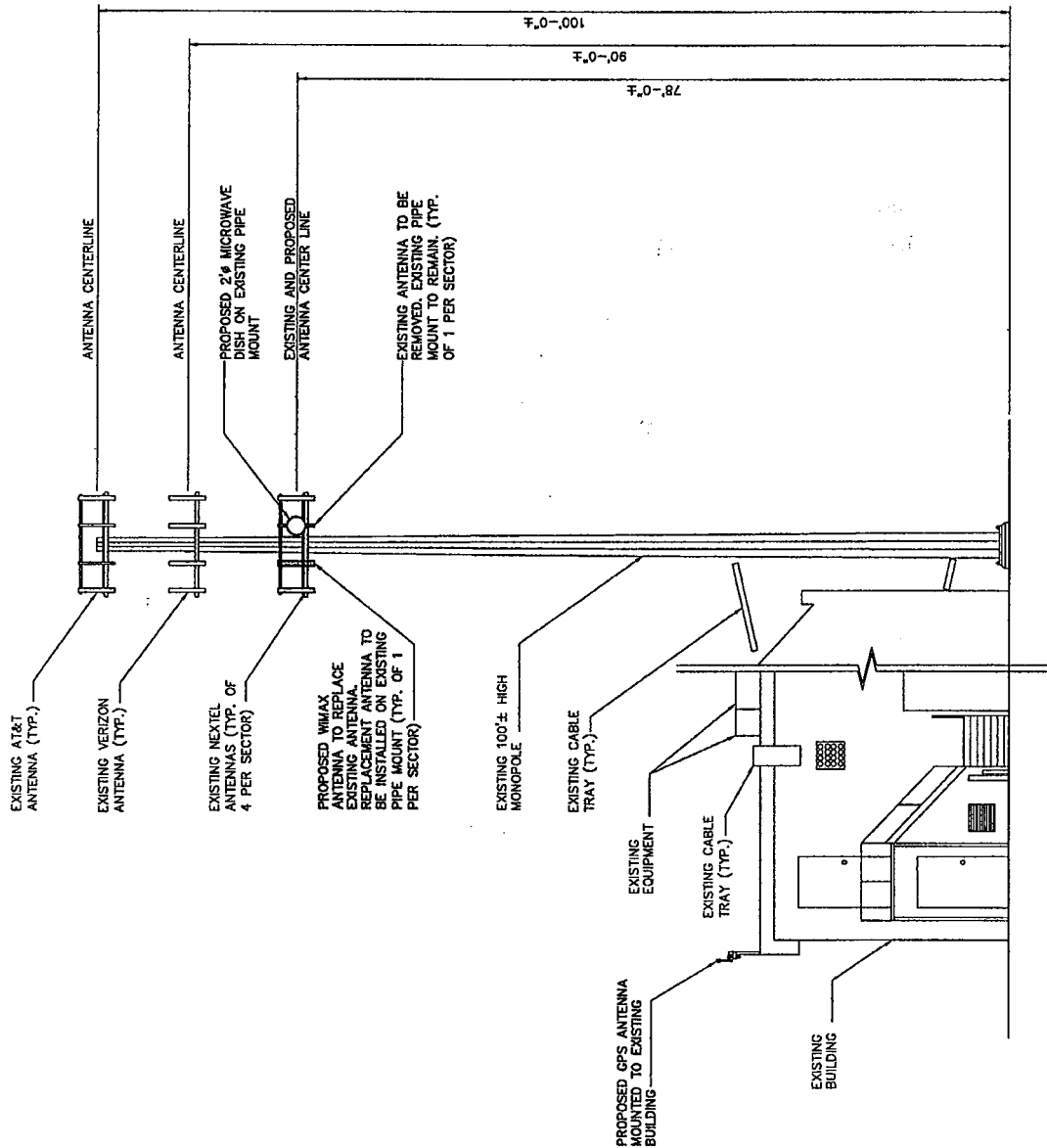
DANBURY SOUTH

CT01YC128/NCT1053

45 NEWTOWN ROAD
 DANBURY, CT 06105

PROJECT NO.

TW1-019	DRAWING NAME	DATE	SHEET NO	REV
36817279	SC-2	11/01/07	3 OF 3	0



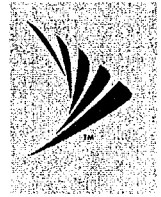
1 TOWER ELEVATION
 SC-2 SCALE: 1" = 20'-0"

DETAILED STRUCTURAL ANALYSIS AND EVALUATION OF AN EXISTING 96' MONOPOLE TOWER AND ITS FOUNDATION FOR NEW ANTENNA ARRANGEMENT

Site I.D #: CT01YC128/NCT1053
Site Name: Danbury South
Address: 48 Newtown Road,
Danbury, CT 06105

prepared for

**Sprint Nextel
Corp.**



1 International Blvd.,
Suite 800
Mahwah, NJ 07495

TRANSCEND WIRELESS, LLC
479 ROUTE 17 NORTH,
2ND FLOOR,
MAHWAH, NJ 07495

prepared by

URS

URS CORPORATION
500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CT 06067
TEL. 860-529-8882

36917279.00000
TW1-019

November 16, 2007

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis of the existing 96' steel monopole structure, located at 48 Newtown Road in Danbury, CT. The analysis was conducted in accordance with the 2005 Connecticut State Building Code and the TIA/EIA-222-F standard for a wind velocity of 85 mph (fastest mile) and 74 mph (fastest mile) concurrent with 1/2" ice. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined in the Introduction Section of this report. The proposed Sprint/Nextel installation is as follows:

Proposed Antenna and Mount	Carrier	Antenna Center Elevation
<u>On the existing Sprint/Nextel Platform:</u>		
<u>Remove:</u>		
(12) Decibel DB844H90E-XY antennas	Sprint/Nextel (existing)	@ 78'
<u>Install:</u>		
(3) KMW AM-X-WM-17-65-00T (WiMax) antennas with (1) KMW RET unit and (1) KMW TMA attached to each antenna.		
(6) Andrew RR-90-11-00DBL antennas (6) 1 5/8" coaxial cables (within monopole)	Sprint/Nextel (Proposed)	@ 78'
(1) 2' dia Andrew VHLP2-23-2WH dish and (2) 1/2" dia coaxial cable (within monopole)		

The results of the analysis indicate that the tower structure has the capacity to support the proposed loading conditions. **The tower and its foundation are considered structurally adequate with the wind load classification specified above and the proposed antenna loading.**

This analysis is based on:

- 1) The tower structure's theoretical capacity, not including any assessment of the condition of the tower.
- 2) Tower geometry and structural member sizes taken from manufacturer's design documents for a 100' monopole, prepared by Engineered Endeavors Incorporated, (EEI), on behalf of Verizon Wireless (formerly Bell Atlantic Mobile), EEI Job # 5246, signed and sealed July 07, 1999.
- 3) Site documentation provided by Transcend Wireless.
- 4) Antenna and mount configuration as specified within Section 2 of this report.
- 5) **The removal of all existing AT&T equipment designated for decommissioning as outlined in Cingular Wireless Equipment Modification notice to the Connecticut Siting Council, dated January 12, 2007.**

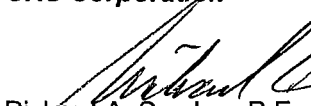
1. EXECUTIVE SUMMARY – continued

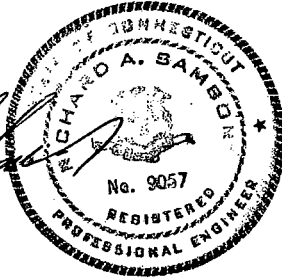
This report is only valid as per the assumptions and data utilized in this report for antenna inventory, mounts and associated cables. The user of this report shall field verify the assumption of the antenna and mount configuration as well as the physical condition of the tower. Notify the engineer in writing immediately if any of the information in this report is found to be other than specified.

If you should have any questions, please call.

Sincerely,

URS Corporation


Richard A. Sambor, P.E.
Manager Facilities Design



RAS/jrm
cc: AA, DR, ICA – URS, CF/Book

Danbury South, CT01YC128 (48 Newtown Road, Danbury, CT) - Siting Council Power Density Calculations

Sprint Nextel 851 MHz iDEN & 2657 MHz WiMax Directional Antennas and 22.5 GHz MW Backhaul 1ft Dish Antenna @ 78'

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	Note: Power densities are in mW/cm ²
WiMAX	2657	1.0000	3	562	78	0.0995970	9.96%
iDEN	851	0.5673	12	100	78	0.0708876	12.49%
Microwave	22500	1.0000	2	4.42	78	0.0005222	0.05%
From previous filings: per CSC power density data base							
Cingular GSM							10.89%
Cingular GSM							1.54%
Cingular UMTS							3.06%
Verizon							13.62%
Verizon							3.80%
Total % of CT Standard							55.41%