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

May 12, 2005

Kenneth C. Baldwin, Esq.
Robinson & Cole
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-030-067-050412** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify existing telecommunications facilities located at 768 Gilead Street, Hebron; and 14 Thompson Hill Road, Columbia, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on May 11, 2005, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, 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 April 12, 2005, including the placement of all necessary equipment and shelters within the tower compounds. 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 sites that would not increase tower heights, extend the boundaries of the tower sites, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities 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 these facilities 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 Victoria Avelis, Board of Selectman Chairman, Town of Hebron
Michael O'Leary, Town Planner, Town of Hebron
The Honorable Chick Shifrin, First Selectman, Town of Columbia
Carl S. Fontneau, Town Planner, Town of Columbia
Jonathan Roush, Site Marketing Manager, Northeast, SBA Network Services, Inc.
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels, LLP
Thomas F. Flynn III, Nextel Communications Inc.
Stephen J. Humes, Esq., McCarter & English LLP
Christopher B. Fisher, Esq., Cuddy & Feder LLP

ROBINSON & COLE LLP

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

April 12, 2005

Via Hand Delivery

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

EM-VER-030-067-050412

Re: **Notice of Exempt Modification – Antenna Swap**
768 Gilead Street, Hebron, CT
14 Thompson Hill Road, Columbia CT

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at each of the sites referenced above. As described below, Cellco now intends to modify each of these facilities.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the chief administrative or elected official in each affected municipality.

Gilead Street Facility, Hebron, CT

Cellco's existing Gilead Street facility consists of three (3) cellular antennas inside an existing flagpole tower owned by the SBA Communications. Cellco now intends to modify its facility by removing all three (3) cellular antennas and replacing them with three (3) dual band cellular/PCS antennas at the same level inside the flagpole tower. Attached behind Tab 1 are specifications for the new antennas for the facility, a new general power density table and an engineer's structural analysis stating that the flagpole can support existing and proposed antennas.

Thompson Hill Road Facility, Columbia, CT

Cellco's existing Thompson Hill Road facility consists of twelve (12) cellular antennas on an existing tower owned by SpintSites, USA. Cellco now intends to modify its facility by replacing six (6) cellular antennas and with six (6) PCS antennas at the same level on the tower. Attached behind Tab 2 are specifications for the existing cellular antennas and the new PCS antennas along with a new general power density table.

The planned modifications to each of these facilities fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in any increase in the overall height of the existing structure. Cellco's replacement antennas will be mounted at the same level on the structures.

2. The proposed modifications will not affect ground-mounted equipment and will not require the extension of the site boundaries.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more.

4. The proposed modifications will not result in radio frequency (RF) power density levels at the facility that exceed the Federal Communications Commission (FCC) adopted safety standard.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facilities constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Enclosures

cc: Paul R. Mazzaccaro, Town of Hebron Town Manager
Chick Shifrin, Town of Columbia First Selectman
Sandy M. Carter

DECIBEL
Base Station Antennas

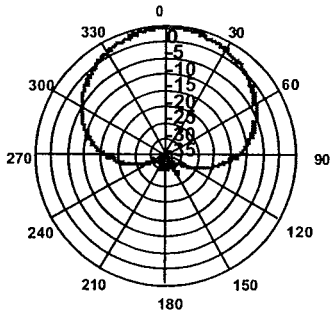
ADFD0820-6565A-XDM

11.9 dBd, Dual Band, ±45° Panel Antenna
824-896, 1710-1880, 1850-1990, 1920-2170 MHz

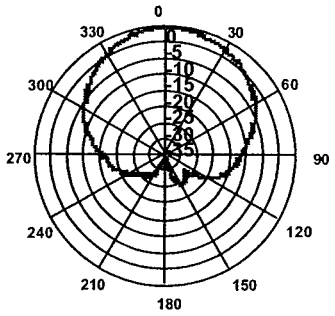
824-896 MHz
1710-1880 MHz
1850-1990 MHz
1920-2170 MHz

65°

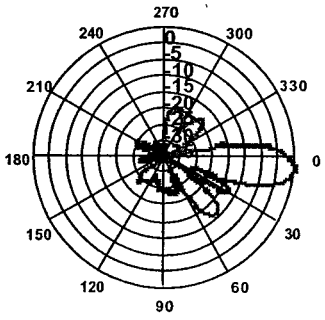
- Provides two independent dual pol antennas under one radome
- Interlaced dipole technology providing for attractive, low wind load mechanical package
- Each antenna is independently capable of field adjustable electrical down tilt
- Fully compatible with Andrew Teletilt™ remote antenna control system.



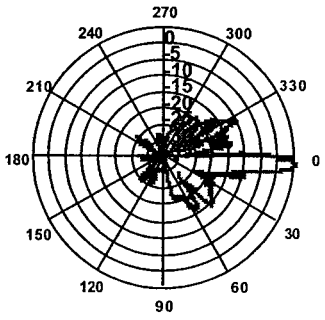
Azimuth 880 MHz (Tilt=5)



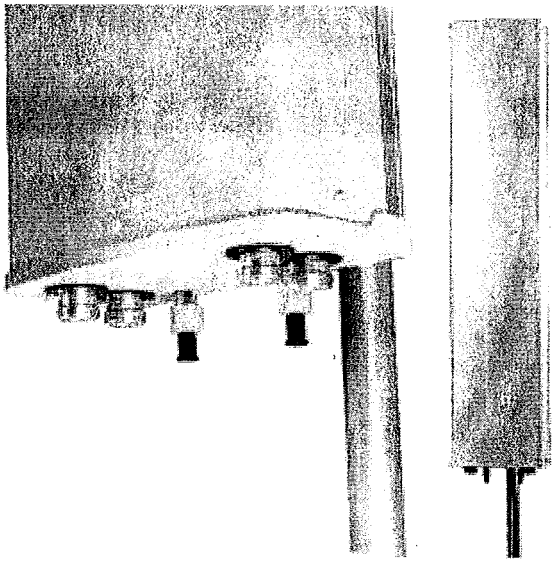
Azimuth 1920 MHz (Tilt=3)



Vertical 880 MHz (Tilt=5)



Vertical 1920 MHz (Tilt=3)



ELECTRICAL

Frequency (MHz):	824-896	1710-1880	1850-1990	1920-2170
Polarization:	+45°/-45°	+45°/-45°	+45°/-45°	+45°/-45°
Gain (dBd/dBi):	11.9/14	14.4/16.5	14.7/16.8	14.9/17
Azimuth BW:	68°	65°	64°	63°
Elevation BW:	16°	7°	6.5°	6°
Beam Tilt:	0-15°	0-8°	0-8°	0-8°
Front-to-Back Ratio* (dB):	25	25	25	25
Isolation (dB):	>25	>30	>30	>30
VSWR:	<1.5:1	<1.5:1	<1.5:1	<1.5:1
IM Suppression - Two 20 Watt Carriers:	-150 dBc	-150 dBc	-150 dBc	-150 dBc
Impedance:	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Max Input Power:	250 Watts	200 Watts	200 Watts	200 Watts
Lightning Protection:	DC Ground	DC Ground	DC Ground	DC Ground

MECHANICAL

Weight:	28 lbs (12.7 kg)
Dimensions (LxWxD):	51.5 X 10.5 X 5.5 in (1308 X 267 X 140 mm)
Max. Wind Area:	1.70 ft² (0.16 m²)
Max. Wind Load (@ 100mph):	96 lbf (427 N)
Max. Wind Speed:	125 mph (201 km/h)
Radome Material:	ABS, UV Resistant
Mounting Hardware Material:	Galvanized Steel
Connector Type:	7-16 DIN (4) - Female (Bottom)
Color:	Off White
Standard Mounting Hardware:	600899A-2

Andrew Corporation
8635 Stemmons Freeway
Dallas, Texas U.S.A 75247-3701
Tel: 214.631.0310

Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342
Fax: 1.800.229.4706
www.andrew.com

dbtech@andrew.com

Date: 8/27/2004
* - Indicates Typical Values

Site Name: Hebron, CT
Tower Height: 137 ft rad center

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE	
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)	
Verizon	869	9	200	1800	137	0.0345	0.5793	5.95%	
Verizon	1900	3	200	600	137	0.0115	1	1.15%	
Total Percentage of Maximum Permissible Exposure								7.10%	

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.

verizonwireless

FDH Engineering, Inc., 557-B Pylon Drive, Raleigh, NC 27606, Ph. 919.755.1012, Fax 919.755.1031

April 1, 2005

Mr. Mark Luther
SBA Network Services, Inc.
800 S. Washington Ave.
Scranton, PA 18505

RE: 150' Flagpole
Site Name: Central Hebron
SBA Site ID: CT04374-S
FDH Project Number: 05-0354E

Dear Mark:

Per your request, FDH Engineering, Inc. has reviewed the original manufacturer's drawings and the proposed loading for the 150' flagpole located in Hebron, CT. The original design configuration by Pirod Inc. (Drawing No. 150464-B dated July 19, 2000) stipulates the tower was designed to accommodate the appurtenance loading outlined in **Table 1** on the following page.

The load resulting from the current configuration (see **Table 2**) combined with Verizon's proposed (3) Andrew ADFD0820-656A-XDM antennae with a centerline elevation at 135 ft. and corresponding (6) 7/8" coax lines (see **Table 3**) which will replace the existing antennae, will be below that of the original design loading. The proposed coax should be installed inside the pole. Furthermore, provided the tower foundation was constructed to support the tower's original design loading, the foundation should meet *TIA-EIA-222-F* standards with both the proposed and existing appurtenances in place.

Our assessment has been made assuming all information provided to FDH Engineering is accurate and that the tower as been properly erected and maintained.

In conclusion, the Verizon installation should meet or exceed all applicable standards and should therefore be considered safe. Should you require additional information, please do not hesitate to contact our office.

Sincerely,

Holly Rose

Holly Rose, EI
Project Engineer

Reviewed By:

J. Darrin Holt

J. Darrin Holt, Ph.D., P.E.
President
CT License No. 22988

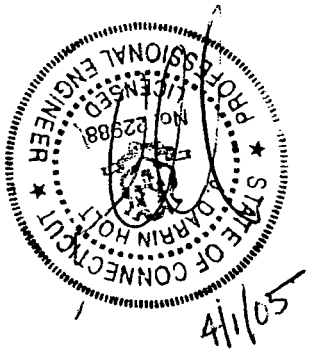


Table 1 – Design Appurtenance Loading

No.	Centerline Elevation (ft)	Coax and Lines	Description
1-3	148	(3) 7/8" Coax	(3) Dual Antennas mounted inside fiberglass shroud
4-6	135	(3) 7/8" Coax	(3) Dual Antennas mounted inside fiberglass shroud
7-9	125	(3) 7/8" Coax	(3) Dual Antennas mounted inside fiberglass shroud
10-12	115	(3) 7/8" Coax	(3) Dual Antennas mounted inside fiberglass shroud
13	75	(1) 1-5/8" Coax	(1) GPS antenna

Table 2 – Existing Appurtenance Loading

No.	Centerline Elevation (ft)	Coax and Lines[1]	Carrier	Description
1-6	145	(6) 7/8"	Nextel	(6) EMS RR90-12-XXXA2 mounted inside fiberglass shroud
7-9	135	(6) 7/8"[2]	Verizon	(3) Decibel DB854DD90E-SX mounted inside fiberglass shroud
10-12	125	(6) 7/8"	Sprint	(3) EMS RR90-17 mounted inside fiberglass shroud
13-15	115	(6) 1-5/8"	AT&T	(3) Allgon 7250 mounted inside fiberglass shroud

1 Coax assumed to run inside pole's shaft.
2 The existing loading for Verizon at 135 ft. will be altered. See proposed loading below.

Table 3 – Proposed Verizon Appurtenance Loading

No.	Centerline Elevation (ft)	Coax and Lines[1]	Description
1-3	135	(9) 7/8" [2]	(3) Andrew ADFD0820-656A-XDM

1 Coax should be installed inside pole's shaft.
2 This represents the full loading at 135 ft. after proposed loading has been installed. Verizon will replace the existing (3) antennae with (3) ADFD0820-656A-XDM antenna. The (3) existing coax will remain and an additional (6) 7/8" coax will be installed for a total of (9).

DECIBEL PRODUCTS

DB844H80E-XY

12.7 dBd
Directional Log Periodic Antenna

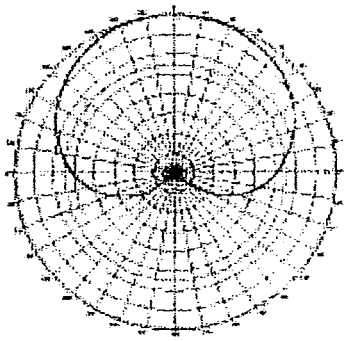
806-960 MHz

dB Director®

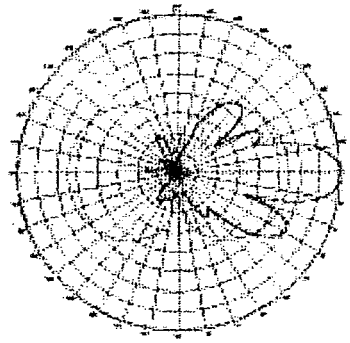
- 806-960 MHz
- 12.7 dBd (14.8 dBi) Gain
- Vertical Polarization
- 80° Azimuth BW
- 15° Elevation BW
- 7/16 DIN
- Cellular and ESMR

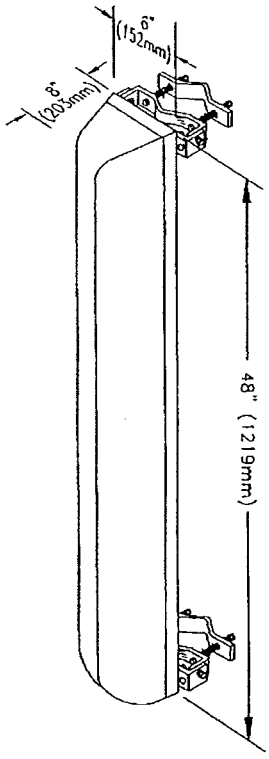
80°

Azimuth (Horizontal)



Elevation (Vertical)





Electrical

VSWR:	< 1.5:1
Front-to-Back Ratio:	> 40 dB, typical
Max. Input Power:	500 Watts
Impedance:	50 Ohms
Lightning Protection:	All metal parts are grounded.

Mechanical

Weight:	10 lbs (4.5 kg)
Wind Area:	2 ft² (0.19 m²)
Wind Load:	80 lbf (356N) 35.9 kp (at 100 mph)
Max. Wind Speed:	125 mph (200 km/h)
Radiators:	Brass
Back Panel:	Pass. Aluminum
Radome:	ABS
Mounting Hardware:	Galvanized Steel
Color:	Normal Gray

~22 w/ mount brackets

Mounting Options

Standard:	DB380 pipe mount kit (max. 3.5" OD), included.
Downtilt:	DB5083 downtilt brackets, optional.

Dimensions 48 x 6 x 8.5

8635 Stemmons Freeway • Dallas, Texas U.S.A. 75247-3701
Dallas/Ft.Worth Area Tel: 214.631.0310 • Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342 • Fax: 1.800.229.4706
www.decibelproducts.com
dbtech@decibelproducts.com

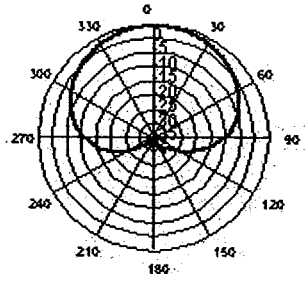
099089-000 07/01-N

ISO9001 Compliant

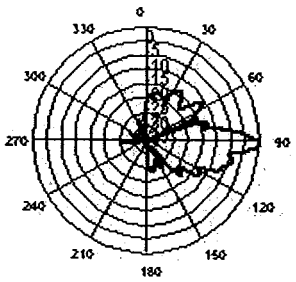
DECIBEL® Base Station Antennas	948F85T2E-M 16.1 dBi, Directed Dipole Antenna 1850-1990 MHz	1850-1990 MHz MaxFill™ dB Director®

- Exceptional azimuth roll-off reducing soft hand-offs and improving capacity
- Excellent upper side lobe suppression
- Deep null filling below the horizon assures improved signal intensity
- Low profile appearance and low wind loading profile for easier zoning approvals

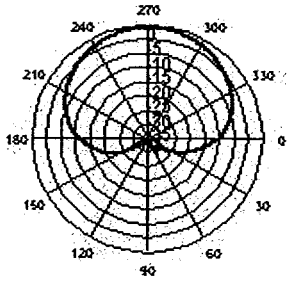
85°



Azimuth 1850 MHz (Tilt=2)



Vertical 1850 MHz (Tilt=2)



Horizontal 1850 MHz (Tilt=2)

ELECTRICAL		MECHANICAL	
Frequency (MHz):	1850-1990	**Weight:**	8.5 lbs (3.9 kg)
Polarization:	Vertical	**Dimensions (LxWxD):**	48 X 3.5 X 7 in (1219 X 89 X 178 mm)
Gain (dBd/dBi):	14/16.1	**Max. Wind Area:**	1.18 ft² (0.11 m²)
Azimuth BW:	85°	**Max. Wind Load (@ 100mph):**	65 lbf (289 N)
Elevation BW:	8°	**Max. Wind Speed:**	125 mph (201 km/h)
Beam Tilt:	2°	**Radiator Material:**	Low Loss Circuit Board
USLS* (dB):	>18	**Reflector Material:**	Aluminum
Null Fill* (dB):	15	**Radome Material:**	ABS, UV Resistant
Front-to-Back Ratio* (dB):	40	**Mounting Hardware Material:**	Galvanized Steel
VSWR:	<1.33:1	**Connector Type:**	7-16 DIN - Female (Bottom)
IM Suppression - Two 20 Watt Carriers:	-150 dBc	**Color:**	Light Gray
Impedance:	50 Ohms	**Standard Mounting Hardware:**	DB390 Pipe Mount Kit, included
Max Input Power:	250 Watts	**Downtilt Mounting Hardware:**	DB5098, optional
Lightning Protection:	DC Ground	**Opt. Mounting Hardware:**	DB5094-AZ Azimuth Wall Mount
Opt Electrical Tilt:	0°,4°,6°		

Andrew Corporation
8635 Stemmons Freeway
Dallas, Texas U.S.A 75247-3701
Tel: 214.631.0310

Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342
Fax: 1.800.229.4706
www.andrew.com

dbtech@andrew.com

Date: 4/29/2004
* - Indicates Typical Values

Site Name: Coventry South, CT
Tower Height: 150 ft rad center

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
Verizon	880	9	200	1800	150	0.0288	0.56733	5.07%
Verizon	1900	3	200	600	150	0.0096	1	0.96%
Total Percentage of Maximum Permissible Exposure								6.03%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.

verizonwireless