

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

March 5, 2005

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

RE: **EM-VER-045-050127** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at Roxbury Road, East Lyme, Connecticut.

Dear Attorney Baldwin:

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.

The proposed modifications are to be implemented as specified here and in your notice dated January 26, 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.

Pamela B. Katz, P.E.

Chairman

PBK/laf

c: The Honorable Wayne L. Fraser, First Selectman, Town of East Lyme Meg Parulis, Planning Director, Town of East Lyme

Jeffrey W. Barbadora, Crown Atlantic Company

Stephen J. Humes, Esq., McCarter & English LLP

Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP

Thomas F. Flynn III, Nextel Communications Inc.



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EM-VER-045-050127

KENNETH C. BALDWIN

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January 26, 2005

Via Hand Delivery

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

Re: Notice of Exempt Modification – Antenna Swap Roxbury Road Telecommunications Facility East Lyme, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility, on an existing tower owned by Crown Atlantic Company, LLC, Roxbury Road in East Lyme. This facility consists of twelve (12) panel-type cellular antennas at the 148-foot level of the 150-foot tower. Equipment associated with the antennas is located in a shelter near the base of the tower.

The Connecticut Siting Council ("the Council") approved the Roxbury Road facility in Docket No. 116. Cellco now intends to modify its facility by replacing six (6) cellular antennas with six (6) PCS antennas at the same 148-foot level on the tower. Attached behind <u>Tab 1</u> are specifications for the existing cellular antennas (Model ALP9212-N) and the proposed PCS antennas (Model 948F85T2E-M) for the Roxbury Road facility.

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 East Lyme First Selectman, Wayne Fraser.

The planned modifications to the Roxbury Road facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).



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S. Derek Phelps January 26, 2005 Page 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 148-foot level on the 150-foot tower.
- 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. Attached behind <u>Tab 2</u> is a new Power Density Calculation Table.

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

Sincerely,

Kenneth C. Baldwin

Enclosures

cc:

Wayne Fraser, First Selectman

Sandy M. Carter



Swedcom Corporation

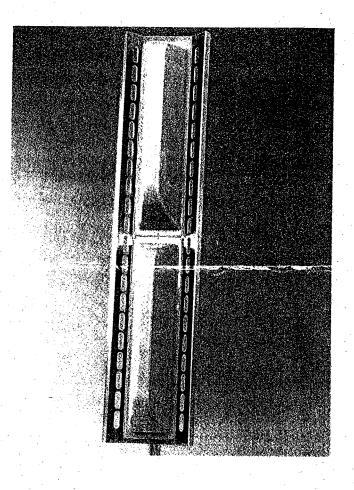
ALP 9212-N

Log-Periodic Reflector Antenna 92 Degrees 12 dBd

Features:

- ☐ Broadbanded. (800-900 MHz)
- ☐ Low backlobe radiation. Front-to-back ratio better than 28 dB
- Low Intermodulation Products.
- ☐ Low Wind-load.
- ☐ Low weight.
- □ Small size.
- Rugged design.

Please see the following pages including radiation patterns/tables for ALP 9212-N.



Electrical Specifications:

Frequency range: 806-896 MHz Impedance: 50 ohm Connector: N-female or 7/8" EIA **VSWR:** Typ. 1.3:1 max 1.5:1 Polarization: Vertical Gain: 12 dBd Front to back ratio: >28 dB Side-lobe supression: >18 dB Intermodulation: (2x25W): IM3 >146 dB IM5 >153 dB IM7 & IM9 >163 dB

Power Rating: H-Plane: -3 dB E-Plane: -3 dB **Lightning Protection:** 500 W

15° DC Grounded

95 °

2.0 <u>VSWR</u> 1.5-1.0 800 820 840 860 880 900

Mechanical Specifications:

Overall Height: 52 in (1320 mm) Width: 11.4 in (290 mm) Depth: 11.4 in (290 mm) Weight including brackets: 26.7 lbs (12 Kg) Rated wind velocity: 113 mph (180 Km/h) Wind Area (CxA/Front): 3.9 sq.ft (0.36 sq.m)Lateral thrust at rated wind

570 N

Materials:

Worst case:

Radiating elements: Aluminum Element housing: **Grey PVC** Back-plate: Aluminum

Mounting hardware clamps:

Hot dip galvanized steel bolts: Stainless steel

Manufactured by: Allgon System AB

DECIBEL®

Base Station Antennas

948F85T2E-M

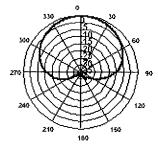
16.1 dBi, Directed Dipole Antenna 1850-1990 MHz 1850-1990 MHz

MaxFill™

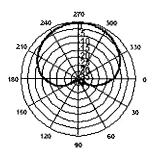
dB Director®

- 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





Azimuth 1850 MHz (Tilt=2)



Horizontal 1850 MHz (Tilt=2)

270		90 120
	186	

٥

Vertical 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): Azimuth BW:	14/16.1 85°	Max. Wind Area:	1.18 ft ² (0.11 m ²)	
Elevation BW:	8°	Max. Wind Load (@ 100mph):	65 lbf (289 N)	
Beam Tilt:	2°	Max. Wind Speed:	125 mph (201 km/h)	
USLS* (dB):	- >18	Radiator Material:	Low Loss Circuit Board	
Null Fill* (dB):	15	Reflector Material:	Aluminum	
Front-to-Back Ratio* (dB):	40	Radome Material:	ABS, UV Resistant	
VSWR:	<1.33:1	Mounting Hardware Material:	Galvanized Steel	
IM Suppression - Two 20 Watt Carriers:	-150 dBc	Connector Type:	7-16 DIN - Female (Bottom)	
Impedance:	50 Ohms	Color:	Light Gray	
Max Input Power:	250 Watts	Standard Mounting Hardware:	DB390 Pipe Mount Kit, included	
Lightning Protection:	DC Ground	Downtilt Mounting Hardware:	DB5098, optional	
Opt Electrical Tilt:	0°,4°,6°	Opt. Mounting Hardware:	DB5094-AZ Azimuth Wali Mount	



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

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

dbtech@andrew.com.

Site Name: East Lyme
Tower Height: 148 Ft. rad center

is. Trans. Trans. Target Density Exposure*	(watts) (watts) (feet) $ (mW/cm^2) (mW/cm^2)$	200 1800 148 0.0296 0.56733 5.21%	255 765 148 0.0126 1 1.26%	num Permissible Exposure 6.47%	
Vumber of ERP Per Trans. Trans.	(watts)	9 200	3 255	um Permissible Ex	
perating Numberequency Trans	(MHz)	6 088	1900 3	_	
Operator		Verizon	Verizon	Fotal Percentage of Maxi	

*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.

