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January 7, 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 260 Beckley Road Telecommunications Facility Berlin, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility, on an existing tower owned by SpectraSite, 260 Beckley Road in Berlin. This facility consists of twelve (12) panel-type cellular antennas at the 116-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 Cellco's shared use of the Beckley Road facility on October 23, 2002 (EM-SPECTRA-007-021011). Cellco now intends to modify its facility by replacing six (6) cellular antennas with six (6) PCS antennas at the same 116-foot level on the tower. Attached behind <u>Tab 1</u> are specifications for the existing cellular antennas and the proposed PCS antennas for the Beckley 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 Berlin Acting Town Manager, Herman Middlebrooks, Jr.

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



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- 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 116-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: Herman Middlebrooks, Jr., Acting Town Manager Sandy M. Carter



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Mechanical specifications

Length	1225 mm	48.2∴in∋
Width	285 mm	11.2 in
Depth	160 mm	6.3 in
4) Weight	6.5 kg	14.3 lbs
Wind Area	0.349 m ² -	3.75 ft²
Wind load	SEO N	176 lha
at 50 m/s	560 N	126 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting & Downtilting:

Mounting brackets attach to a pipe diameter of Ø50-160 mm (2.0-6.3 in).

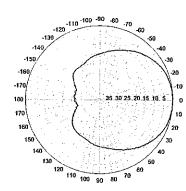
Mounting bracket kit #36210002 Downtilt bracket kit #36114003

Electrical specifications

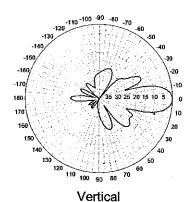
Impedance 50Ω → 1 3 Connector → NE,E-DIN 1 VSWR → ≤1.4:1 Polarization Vertical	
1 ¹ VSWR ≤1.4)1	
Land Carlo (1981) Report Commencer (1981)	Toke Lin
and Delocization and Alexanders	NIN MA
¹⁾ Gain 14 dBd	
²⁾ Power Rating 500 W	Section of
Half Power Angle	
H-Plane 62° 11° 11° 11° 11° 11° 11° 11° 11° 11° 1	
E-Plane 14°	
Description 1:25°	
Null Fill 5% Lighthing Protection Direct Ground	27.7

Improvements to mechanical and/or electrical performance of the tenna may be made without notice.

Radiation-pattern1)



Horizontal

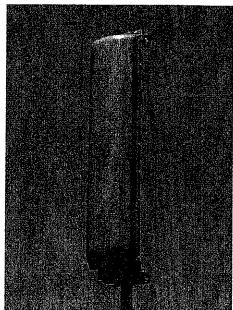


Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole,

Mounting on a metal pole will typically improve the Front-to-Back Ratio.

RWA-80014

When ordering, replace "___" with connector type.





Amphenol Antel's **Exclusive 3T (True** Transmission Line Technology) Antenna Design:

- A 1 1/4" four-channel extrusion running the entire length of the antenna for unmatched strength and rigidity.
- Durable brass feedline design that eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad band width and superior performance.
- Air as insulation for virtually no internal signal loss.

Every Amphenol Antel antenna is under a fiveyear limited warranty for repair or replacement.

Antenna can be ordered with bottomfed or center-fed connector. For center-fed connector, order model number RWA-80014CF + connector (NE, E-DIN).

Example: RWA-80014CF E-DIN

806-960 MHz



Typical Values

Power Rating limited by connector only.

NE indicates an elongated N Connector

E-DIN indicates an elongated DIN Connector.

The antenna weight listed above does not include the

bracket weight.

DECIBEL

Base Station Antennas

948F85T2E-M

16.1 dBi, Directed Dipole Antenna 1850-1990 MHz

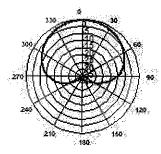
1850-1990 MHz

MaxFill™

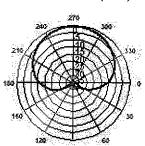
dB Director®

- 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)

3	د. سينسن (196		16 ³	
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2	10	*~-ـــ <u>_</u>	150 ·	
		186		

Vertical 1850 MHz (Tilt=2)

210 220 230 230 230 230 230 230 230 230 23	

ELECTRICAL		MECHANICAL		
Frequency (MHz):	1850-1990	Weight:	8.5 lbs (3.9 kg)	
Polarization: Gain (dBd/dBi);	Vertical 14/16.1	Dimensions (LxWxD):	48 X 3.5 X 7 in (1219 X 89 X 178 mm)	
Azimuth BW:	85°	Max. Wind Area:	1.18 ft² (0.11 m²)	
Elevation BW:	8°	Max. Wind Load (@ 100mph):	65 lbf (289 N)	
Beam Tilt:	2°	Max. Wind Speed:	125 mph (201 km/h)	
JSLS* (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	
/swr:	<1.33:1	Mounting Hardware Material:	Galvanized Steel	
M Suppression - Two 20 Watt Carriers:	-150 dBc	Connector Type:	7-16 DIN - Female (Bottom)	
mpedance:	50 Ohms	Color:	Light Gray	
Max Input Power:	250 Watts	Standard Mounting Hardware:	DB390 Pipe Mount Kit, included	
Ightning Protection:	DC Ground	Downtilt Mounting Hardware:	DB5098, optional	
Opt Electrical Tilt:	0°,4°,6°	Opt. Mounting Hardware:	DB5094-AZ Azimuth Wall 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

Tower Height: 116 ft rad center Berlin 2, CT Site Name:

Eraction of	(%)	8.30%	1.60%	9.91%
Maximum Permissable Exposure*	(mW/cm^2) (mW/cm^2)	0.5793	,	
Calculated Power	(mW/cm^2)	0.0481	0910'0	
Distance to	(teet)	116	116	
Total ERP	(watts)	1800	009	sposure
Trans.	(watts)	200	200	imum Permissible Exposure
Number of Trains.		6	3	mum Peri
Coperating Frequency	(MHz)	869	1900	ital Percentage of Maxi
Operator.		Verizon	Verizon	Total Percen

*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.

