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EM-VER-054-080214

KENNETH C. BALDWIN

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ORIGINAL

February 14, 2008

Via Hand Delivery

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



CONNECTICUT SITING COUNCIL

Re: Notice of Exempt Modification – Antenna Swap 175 Dickinson Road, Glastonbury, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at the above referenced location. The Council approved Cellco's shared use of this facility on December 19, 2000. On March 15, 2005, the Council approved Cellco's request to replace six cellular antennas with six PCS antennas. Cellco now intends to modify its installation by replacing six (6) SC9012 antennas with six (6) WPA-80090/4CF antennas at the 167-foot level on the 176-foot tower. Attached behind <u>Tab 1</u> are the specifications for the proposed replacement antennas.

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 Richard J. Johnson, Town Manager of the Town of Glastonbury. Pursuant to a Council directive a copy of this letter is also being sent to Randall S. Chapman and Ronald J. and Beverly L. Bronzi, owners of the property on which the facility is located.

The planned modifications to the facility 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 structures. Cellco's replacement antennas will be located at the 167-foot level of the 176-foot tower.



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- 2. The proposed modifications will not involve any ground-mounted equipment and, therefore, 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 operation of the replacement antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. A cumulative power density table for the facility is included behind <u>Tab 2</u>.

Also attached is a Structural Letter confirming that the tower can support the proposed modifications. (See <u>Tab 3</u>).

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

Sincerely,

Kenneth C. Baldwin

Enclosures Copy to:

Richard J. Johnson, Glastonbury Town Manager

Randall S. Chapman and Ronald J. and Beverly L. Bronzi

Sandy M. Carter



WPA-80090/4CF

When ordering replace "___" with connector type.

Mechanical specifications

	Length	1205	mm	47.4	in
	Width	205	mm	8.1	in
	Depth Depth with z-bracket	1000	mm mm	5.7 7.3	0.00
4) Weight	5.4	kg	12.0	lbs
	Wind Area Fore/Aft	0.25	m²	2.7	ft²
	Side	0.17	m^2	1.9	ft ²
	Rated Wind Velocity	(Safe	ty facto	or 2.0)	
		>679	km/hr	>422	mph
	Wind Load @ 100 m	ph (16	61 km/l	nr)	
	Fore/Aft	362	N	81.4	lbs
	Side	264	N	59.4	lbs

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

Mounting and Downtilting

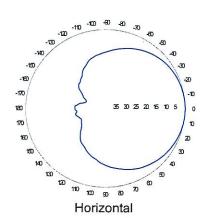
Mounting brackets attach to a pipe diameter of Ø50-127 mm (2.0-5.0 in).

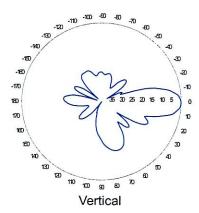
Mounting bracket kit #36210002 Downtilt bracket kit #36114003

Electrical specifications

1000		mounding
	Frequency Range	806-960 MHz
	Impedance	50Ω
3)	Connector(s)	NE or E-DIN 1 port / center
1)	VSWR	≤ 1.4:1
	Polarization	Vertical
1)	Gain	11.5 dBd
2)	Power Rating	500 W
1)	Half Power Angle	
	H-Plane	90°
	E-Plane	15°
1)	Electrical Downtilt	0°
1)	Null Fill	10%
	Lightning Protection	Direct Ground

Radiation pattern¹⁾

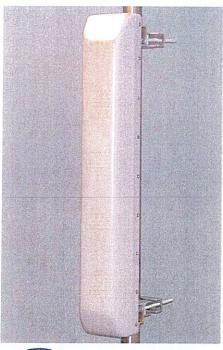




Featuring upper side lobe suppression.

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.





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

- Watercut brass feedline assembly for consistent performance.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

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

Antenna available with center-fed connector only.

Patented Dipole Design: U.S. Patent No. 6,229,496 B1

- 1) 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.

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

CF Denotes a Center-Fed Connector.

806-960 MHz



					Total							14.84%				
				FRACTION	MPE	2.16%	1.93%	1.93%	1.64%	5.64%	1.55%					
			MAX.	PERMISS.	EXP.	1.0000	1.0000	0.5867	1.0000	0.5866	1.0000					
					FREQ.	1930	1962.5	880	1930	880	1900					
!		i	CALC.	POWER	DENS	0.0216	0.0193	0.0113	0.0164	0.0331	0.0155					
Density					HEIGHT	177	158	137	137	167	167					
Power					WATTS ERP	470	122	296	427	285	400					
General	st Glastonbury 2	/erizon @ 167Ft.			# OF CHAN.	4	11	2	2	6	3					
	Site Name: East	Tower Height: Vo			CARRIER	*VoiceStream	*Sprint	*Cingular	*Cingular	Verizon	Verizon		* Source: Siting	Council		

. .



FDH Engineering, Inc., 2730 Rowland Rd., Suite 100, Raleigh, NC 27615, Ph. 919.755.1012, Fax 919.755.1031

February 8, 2008

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

RE: 176' Monopole

Site Name: Glastonbury SBA Site ID: CT02216-S

FDH Project Number: 08-02004E

Dear Noel:

Per your request, FDH Engineering, Inc. has reviewed the original manufacturer's drawings, previous structural analysis, and the proposed loading for the 176' monopole located in Glastonbury, CT. The structural analysis report by FDH Engineering, Inc. (Project No. 05-0353E dated March 23, 2005) stipulates the tower was analyzed with the current appurtenance loading outlined in **Table 1** on the following page.

It is our understanding Verizon will revise their loading to (6) Antel WPA-80090/4CF antennas and (6) Decibel DB948F85T2E-M antennas with corresponding (12) 1-5/8" coax lines at a centerline elevation of 167' (see **Table 2**). Given the working percentage calculated in the previous analysis, the load resulting from the existing and proposed loading will not overstress the tower and will be within EIA/TIA-222-F standards. Furthermore, provided the foundation was constructed per the original design drawings (see PJF Job No. 29200-887), the foundation should be adequate to support both the proposed and existing loading.

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.

With the Party of the Party of

Sincerely,

Adrian L. Creech, El Project Engineer

Adrian L. Creech

Reviewed By:

Christopher M. Murphy, P.E.

Christopher M. Murphy

Vice President

CT PE License No. 25842

Table 1 - Existing Appurtenance Loading

	Elevation	Coax and Lines	Carrier	Description
1-6	177	(12) 1-5/8" ¹	T-Mobile	(6) EMS RR90-17-02DP + (12) MHA's
7-18	167	(12) 1-5/8" ²	Verizon	(6) Swedcom ALP9011 (6) Decibel DB948F85T2E-M
19-30	157	(12) 1-5/8 ³	Sprint	(12) Decibel DB980H90
31-42	147	(12) 1-5/8 ⁿ⁴	AT&T	(12) Allgon 7184
43-54	137	(12) 1-5/8" ⁵	Cingular	(12) CSS DUO1417-8686
55	100	(1) 7/8" ⁶	Unknown	(1) PD201
56	98	(1) 7/8 ^{"6}	Unknown	(1) DB806
57	95	(1) 7/8" ⁶	Unknown	(1) DB806
58	36	(1) 7/8" ⁶	Unknown	(1) Scala Grid Dish

¹ Currently, T-Mobile has (4) antennas, (8) MHA's, and (4) coax installed at 177 ft. According to information provided by SBA, T-Mobile may install up to (6) antennas, (12) MHA's, and (12) coax. Evaluation performed with full loading in place.

Table 2 – Proposed Appurtenance Loading

and the second s	Centerline Elevation (ft)	Coax and Lines	Carrier	Description
1-12	167	(12) 1-5/8"1	Verizon	(6) Antel WPA-80090/4CF (6) Decibel DB948F85T2E-M

¹ This represents the total loading for Verizon after the proposed loading has been installed. Verizon will swap (6) ALP9011 existing antenna with (6) WPA-80090/4CF antennas for a total loading of (12) antennas and (12) coax at 167 ft.

² The existing loading for Verizon will be altered. See proposed loading below.

³ Currently, Sprint has (6) antennas and (6) coax installed at 157 ft. According to information provided by SBA, Sprint may install up to (12) antennas and (12) coax. Evaluation performed with full loading in place.

⁴ Currently, AT&T has (3) antennas and (6) coax installed at 147 ft. According to information provided by SBA, AT&T may install up to (12) antennas and (12) coax. Evaluation performed with full loading in place.

⁵ Currently, Cingular has (9) antennas, (6) TMA's, and (9) coax installed at 137 ft. According to information provided by SBA, Cingular may install up to (12) antennas and (12) coax. The (3) additional coax are assumed to be ran outside the pole's shaft. Evaluation performed with full loading in place.

⁶ Coax assumed to run outside the pole's shaft.