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ORIGINAL

KENNETH C. BALDWIN

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Via Hand Delivery

S. Derek Phelps Executive Director Connecticut Siting Council 10 Franklin Square New Britain, CT 06051 October 15, 2008

OCT 15 2008

CONNECTICUT
SITING COUNCIL

Re: Notice of Exempt Modification – Antenna Modification Installation of Temporary Microwave Dish Antenna 113 Brush Hill Road, Goshen, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at the above-referenced address. The existing 195-foot tower is owned by Bay Communications. The Council approved Cellco's use of this facility on February 2, 2005. At that time, Cellco installed twelve antennas at the 185-foot level on the tower. More recently, the Council approved Cellco's request to replace its existing antennas with six (6) LPA-185080/12CF antennas with six (6) LPA-80080/6CF antennas at the same height (EM-VER-055-080131). Cellco now intends to install a microwave dish antenna at the 181-foot level of the tower. Attached behind <u>Tab 1</u> are the specifications for the proposed microwave antenna.

The proposed microwave antenna will connect with the microwave antenna proposed to be installed at the Mohawk Mountain cell site located off Mohawk Mountain Road in Cornwall, Connecticut. This microwave transmission link between the Goshen and Mohawk Mountain cell sites is needed to compensate for the lack of T-1 line availability at the Mohawk Mountain cell site; a cell site recently acquired by Cellco from Alltel Communications. Efforts to install additional T-1 lines at the Mohawk Mountain site are underway. As soon as the additional T-1 lines are available at Mohawk Mountain, the microwave dish antenna described above will be removed.

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



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S. Derek Phelps October 15, 2008 Page 2

to Robert P. Valentine, First Selectman of the Town of Goshen. Pursuant to Council directive a copy of this letter is being sent to Woodridge Sewer District, the owner 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. The proposed microwave dish antenna will be located at the 181-foot level of the 195-foot tower.
- 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 microwave antenna 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 Analysis 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 Raldwin

Enclosures

Copy to:

Robert P. Valentine, Goshen First Selectman Woodridge Sewer District Sandy M. Carter

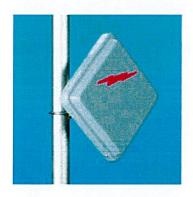


Product Specifications



FPA5250D24-N

Flat Panel Array Antenna, single-polarized, 5.25–5.85 GHz, type N female flange, UV protected plastic offwhite radome, no flash, standard pack—flat panel



CHARACTERISTICS

General Specifications

Diameter, nominal 0.6 m | 2 ft
Antenna Input N Female

Antenna Type Flat Panel Array, Unpressurized

Polarization Single

Reflector Construction Flat panel reflector

Radome Color Off-white

Radome Material Description UV Protected Plastic

Flash Included No

Packing Standard pack

Electrical Specifications

Operating Frequency Band 5.250 – 5.850 GHz

Gain, Mid Band
28.5 dBi
Front-to-Back Ratio
43 dB
Cross Polarization Discrimination (XPD)
30 dB
Beamwidth, Horizontal
4.8°
Beamwidth, Vertical
VSWR
1.50
Return Loss
Radiation Pattern Envelope Reference (RPE)
4744

Mechanical Specifications

Net Weight 26 lb | 12 kg

Packed Dimensions

Product Specifications



Length Width Height 26.0 in | 660.4 mm 9.0 in | 228.6 mm 26.0 in | 660.4 mm

* Footnotes

Cross Polarization Discrimination (XPD)

The difference between the peak of the co-polarized main beam and the maximum cross-polarized

signal over an angle twice the 3 dB beamwidth of the co-polarized main beam.

Front-to-Back Ratio Denotes highest radiation relative to the main beam, at 180° ± 40°, across the band. Production

antennas do not exceed rated values by more than 2 dB unless stated otherwise.

Gain, Mid Band For a given frequency band, gain is primarily a function of antenna size. The gain of Andrew

antennas is determined by either gain by comparison or by computer integration of the measured

antenna patterns.

Operating Frequency Band Bands correspond with CCIR recommendations or common allocations used throughout the world.

Other ranges can be accommodated on special order.

Packing Andrew standard packing is suitable for export. Antennas are shipped as standard in totally

recyclable cardboard or wire-bound crates (dependent on product). For your convenience, Andrew

offers heavy duty export packing options.

Radiation Pattern Envelope Reference (RPE) Radiation patterns determine an antenna's ability to discriminate against unwanted signals under

conditions of radio congestion. Radiation patterns are dependent on antenna series, size, and

equency

Return Loss The figure that indicates the proportion of radio waves incident upon the antenna that are rejected as

a ratio of those that are accepted.

VSWR Maximum; is the guaranteed Peak Voltage-Standing-Wave-Ratio within the operating band.

	General	Power	Density					
Site Name: Goshen South								
Tower Height: Verizon @ 181	Ft. & 185Ft.							
				CALC.		MAX.		
				POWER		PERMISS.	PERMISS. FRACTION	
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	DENS	FREQ.	EXP.	MPE	Total
*Sprint	11	213	195	0.0222	1962.5	1.0000	2.22%	
Verizon	12	485	185	0.0611	1970	1.0000	6.11%	
Verizon	6	200	185	0.0189	875	0.5833	3.24%	
Verizon Microwave	1	53.95	181	0.0006	5400	1.0000	%90.0	11.63%
* Source: Siting Council								

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September 2, 2008

Mr. Tom Nolan Real Estate Consultant Verizon Wireless 99 East River Drive, 9th Floor East Hartford, CT 06108

Reference:

Proposed Verizon Wireless Antenna Installation -

Goshen South 113 Brush Hill Road Goshen, Connecticut

URS proj no: 36931116/VZ4-040

Dear Mr. Nolan:

URS Corporation (URS) has been retained by Verizon Wireless to assess the structural adequacy of the existing tower structure, located at 113 Brush Hill Road in Goshen, CT; with regard to its ability to support an additional proposed flat panel array antenna and coaxial cable feed line. The existing structure consists of a 195' high tapered steel monopole tower, designed and manufactured by Engineered Endeavors, Incorporated, (EEI).

The findings of this letter are based upon a comparative review of the following:

- 1) The tower structure's theoretical capacity not including any assessment of the condition of the tower.
- 2) Tower geometry and structural member sizes utilized in the preparation of this report obtained from manufacturers original design documents prepared by Engineered Endeavors, Incorporated, (EEI); Job No. 12782, signed and sealed July 28, 2004.
- Structural analysis report entitled 'Detailed Structural Analysis and Evaluation of an Existing 195' Monopole for Proposed Antenna Arrangement' prepared by URS Corporation on behalf of Verizon Wireless, Revision #1, dated January 25, 2008.
- 4) Basic Wind Speed:
 - Litchfield County; v = 80mph (fastest mile) [Section 16 of TIA/EIA-222-F-1996]
 - Goshen; v = 90mph (3 second gust) [Appendix K 2005 Connecticut State equivalent to 75mph (fastest mile)
 Building Code Supplement]

Note: TIA/EIA-222-F-1996 wind speed of 80mph governs.

Antenna and coaxial cable inventory as specified in Table 1 of the following page:

URS

Goshen South 113 Brush Hill Road, Goshen, CT URS Project #: VZ4-040/36931116

continued from page 1

The following inventory (existing and proposed) was used by URS to determine the structural feasibility of the tower structure:

TABLE 2: Tower Inventory (Proposed equipment indicated in bold)

Antenna Type	Carrier	:Mount	Antenna Centerline Elevation	Cable
7' Lightning Rod	N/A	5' Pipe Mount Extension	202.5'	N/A
(12) Dapa 48000 panel antennas see note (i) below	Sprint/Nextel (existing)	Low Profile Platform	195'	(12) 1-5/8" (within monopole)
(6) Antel LPA-185080/12CF panel antennas	Verizon (existing)	Low profile Platform (existing to remain)	185'	(12) 1-5/8" (within monopole)
(6) Antel LPA-80080/6CF panel antennas	Verizon (previously proposed - see note (ii) below)	Low profile Platform (same as above)	185'	(re-use existing listed above)
(1) Andrew FPA5250 flat panel array antenna (26"x26"x9")	Verizon (proposed)	Pipe/Flush Mount	181'	(1) RFS E60 Elliptical (within monopole - see note (iii) below
(1) GPS antenna	Sprint/Nextel (existing)	GPS mount	50'	(1) 7/8" (within monopole)

Notes:

- 1. Sprint/Nextel inventory based on original design documents.
- See previous Structural Analysis Report by URS Corporation, Revision #1, dated January 25, 2008.
- III. Proposed Verizon Wireless coaxial cable shall be installed within existing monopole.

A comparison of the original tower design loading, the aforementioned previous structural analysis prepared by URS Corporation, against the existing and proposed tower loading indicates that the tower structure has satisfactory structural capacity to adequately support the additional proposed Verizon Wireless flat panel array antenna. The tower, anchor bolts and its foundation are therefore considered structurally adequate with the wind load classification specified above and the proposed antenna loading.

If you should have any questions, please call.

Sincerely,

URS Cerporation

Richard Sambor, P.E.

Senior Structural Engineer

RS/jrm

CC:

CF/Book - URS