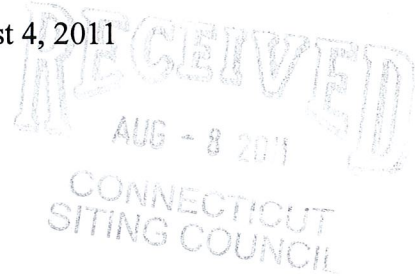


280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

August 4, 2011



David Martin
Siting Analyst
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **EM-VER-064-100812 – Cellco Partnership d/b/a Verizon Wireless
590 Asylum Street, Hartford, Connecticut**

Dear Mr. Martin:

On August 30, 2010, the Siting Council acknowledged receipt of Cellco’s notice of intent to modify the above-referenced telecommunications facility. This modification involved the addition of three (3) LTE antennas, which in turn, required the replacement of the existing antenna mounts.

Attached is an Existing Telecommunications Tower Modification Certification Letter verifying that the antenna mount replacements were completed in accordance with the recommendations in the Structural Letter submitted with the original exempt modification filing and that the antenna mounting structures do not exceed 100% of their post-construction structural rating. Construction activity associated with these modifications has now been completed.

If you have any questions regarding any of these materials, please do not hesitate to contact me or Rachel Mayo.

Sincerely,

Kenneth C. Baldwin

Attachment

Copy to:

Sandy M. Carter
Brian Ragozzine
Mark Gauger



Law Offices

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STAMFORD

WHITE PLAINS

NEW YORK CITY

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Centered on SolutionsSM

August 3, 2011

Mr. Mark Gauger
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Re: Exiting Telecommunications Tower Modification Certification Letter

Project: Verizon ~ Hartford West
590 Asylum Street
Hartford, Connecticut

Engineer: Centek Engineering
63-2 North Branford Road Branford, CT 06405

Contractor: Construction Services of Branford
63-2 North Branford Road , Branford CT 06405

Centek Project No.: 10001.CO53

Dear Mr. Gauger,

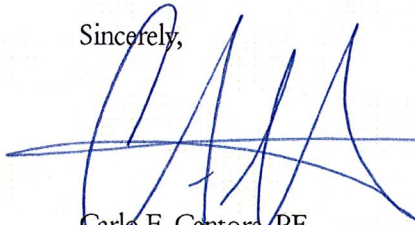
We are providing this "Existing Telecommunications Tower Modification Certification Letter" with regard to the antenna upgrade by Verizon Wireless at the above referenced project.

The following are the basis for substantiating compliance with the design documents prepared by Centek Engineering:

- Review of the structural letter prepared for Verizon Wireless by Centek Engineering entitled "structural certification letter Hartford West," dated 6/2/2010.
- Field observations by Centek personnel of antenna installation on 7/3/2011 confirming compliance with the above referenced documents.
- The tower and foundation do not exceed 100 percent of their post-construction structural rating.

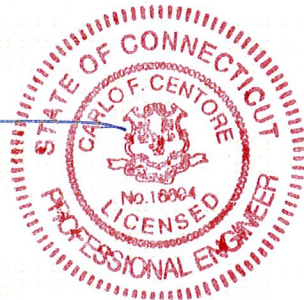
The work under this Contract has been reviewed and found, to the Engineer's best knowledge, information and belief, to be completed in general compliance with the documents referenced above.

Sincerely,



Carlo F. Centore, PE
Principal ~ Structural Engineer

CC: Rachel Mayo, Tim Parks,





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@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

August 30, 2010

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

RE: **EM-VER-064-100812-** Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 590 Asylum Street, Hartford, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- a) the Verizon replace existing antenna mounts as specified in the structural analysis prepared by Centek Engineering dated June 2, 2010 and stamped by Carlo Centore; and
- b) The antenna mounting structure shall not exceed 100 percent of its post-construction structural rating; and
- c) Not more than 45 days after completion of construction, a signed letter from a Professional Engineer duly licensed in the State of Connecticut shall be submitted to the Council to certify that the antenna mount replacements have been properly completed and the antenna installation complies with applicable building code requirements.


The proposed modifications are to be implemented as specified here and in your notice dated August 12, 2010, 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. Please be advised that the validity of this action shall expire one year from the date of this letter. 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.

Very truly yours,



Linda Roberts
Executive Director

LR/CDM/laf

- c: The Honorable Pedro E. Segarra, Mayor, City of Hartford
- David B. Panagore, Chief Operating Officer, City of Hartford
- Roger J. O'Brien, Director of Planning, City of Hartford
- Grove Hartford Associates



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@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

August 18, 2010

The Honorable Pedro E. Segarra
Mayor
City of Hartford
Municipal Building
550 Main Street
Hartford, CT 06103

RE: **EM-VER-064-100812-** Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 590 Asylum Street, Hartford, Connecticut.

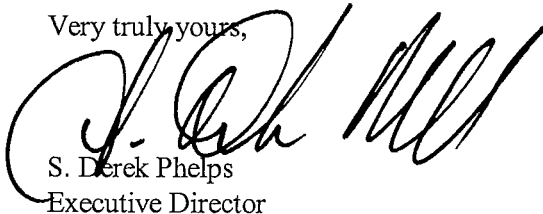
Dear Mayor Segarra:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by September 1, 2010.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/jbw

Enclosure: Notice of Intent

c: David B. Panagore, Chief Operating Officer, City of Hartford
Roger J. O'Brien, Director of Planning, City of Hartford

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

ORIGINAL

August 12, 2010

Via Hand Delivery

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

RECEIVED
AUG 12 2010
CONNECTICUT
SITING COUNCIL

Re: **Notice of Exempt Modification – Facility Modification
590 Asylum Street, Hartford, Connecticut**

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains twelve (12) wireless telecommunications antennas at two levels on the roof of an existing building at the above-referenced address. The building is owned by Grove Hartford Associates, LP. The Council approved Cellco’s use of this roof-top in 1994 and maintains jurisdiction over this telecommunications facility. Cellco now intends to modify its installation by adding three (3) model BXA-70040/6CF_2 LTE antennas, for a total of fifteen antennas, all at the same levels on the roof. Attached behind Tab 1 are the specifications for the proposed LTE 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 Pedro E. Segarra, Mayor for the City of Hartford. A copy of this letter is also being sent to Grove Hartford Associates, LP, the owner of the property at 590 Asylum Street.

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 height of any element of the telecommunications facility. Cellco’s antennas will be located at the same levels on the roof and will not extend above the tallest part of the building.



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S. Derek Phelps
August 12, 2010
Page 2

2. The proposed modifications will not involve any changes to ground-mounted equipment and, therefore, will not require the extension of the site boundary.


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

4. The operation of the LTE 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 power density table for Cellco's modified facility is included behind Tab 2.

Also attached is a Structural Certification Letter confirming that the roof can support Cellco's proposed antenna modifications. (See Tab 3).

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:

Pedro E. Segarra, Hartford Mayor
Grove Hartford Associates, LP
Sandy M. Carter

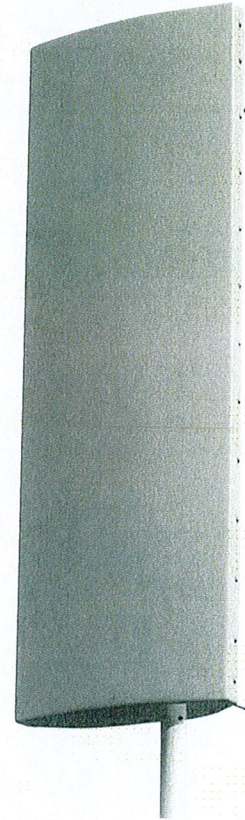


BXA-70040-6CF-EDIN-X

X-Pol | FET Panel | 40° | 16.0 dBd

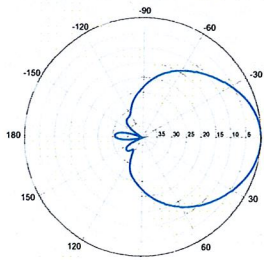
Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.



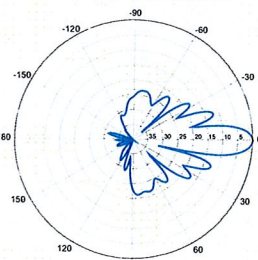
Electrical Characteristics	696-900 MHz		
Frequency bands	696-806 MHz	806-900 MHz	
Polarization	±45°		
Horizontal beamwidth	42°	40°	
Vertical beamwidth	12°	10°	
Gain	15.5 dBd (17.6 dBi)	16.0 dBd (18.1 dBi)	
Electrical downtilt (X)	0, 2, 4, 6, 8, 10		
Impedance	50Ω		
VSWR	≤1.35:1		
Upper sidelobe suppression (0°)	-12.1 dB	-13.4 dB	
Front-to-back ratio (+/-30°)	-35.8 dB	-38.0 dB	
Null fill	5% (-26.02 dB)		
Isolation between ports	< -27 dB		
Input power	500 W		
Lightning protection	Direct Ground		
Connector(s)	2 Ports / EDIN or NE / Female / Center (Back)		
Mechanical Characteristics			
Dimensions Length x Width x Depth	1806 x 606 x 200 mm	71.1 x 23.9 x 7.9 in	
Depth with z-brackets	240 mm	9.4 in	
Weight without mounting brackets	17 kg	38 lbs	
Survival wind speed	> 201 km/hr		
Wind area	Front: 1.09 m ² Side: 0.36 m ²	Front: 11.8 ft ² Side: 3.9 ft ²	
Wind load @ 161 km/hr (100 mph)	Front: 1564 N Side: 547 N	Front: 350 lbf Side: 123 lbf	
Mounting Options	Part Number	Fits Pipe Diameter	Weight
3-Point Mounting Bracket Kit	36210003	50-160 mm 2.0-6.3 in	6.3 kg 14 lbs
3-Point Downtilt Bracket Kit	36210004	50-160 mm 2.0-6.3 in	7.3 kg 16 lbs
Downtilt Mounting Applications	A mounting bracket and downtilt bracket kit must be ordered for downtilt applications		
Concealment Configurations	This model cannot be used in a standard FP concealment configuration		

BXA-70040-6CF-EDIN-X



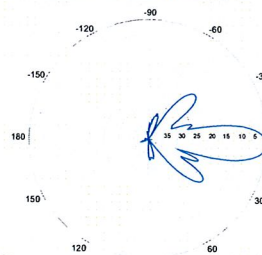
Horizontal | 750 MHz

BXA-70040-6CF-EDIN-0



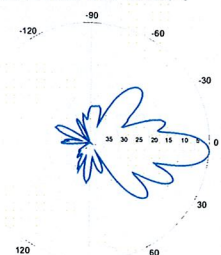
0° | Vertical | 750 MHz

BXA-70040-6CF-EDIN-2

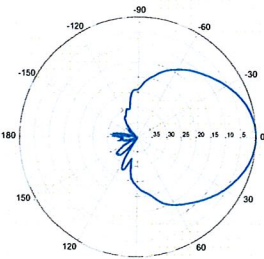


2° | Vertical | 750 MHz

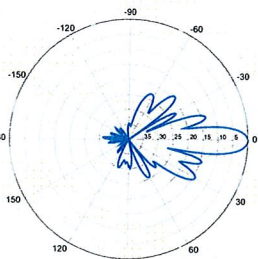
BXA-70040-6CF-EDIN-4



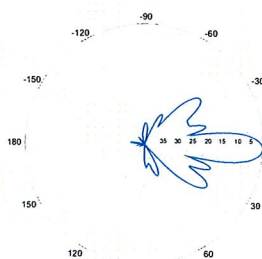
4° | Vertical | 750 MHz



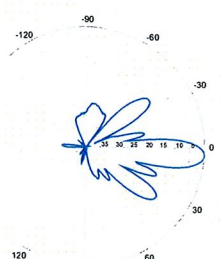
Horizontal | 850 MHz



0° | Vertical | 850 MHz



2° | Vertical | 850 MHz



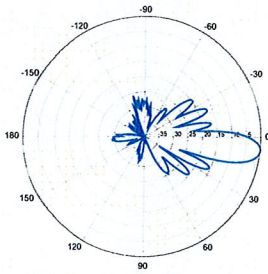
4° | Vertical | 850 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

BXA-70040-6CF-EDIN-X

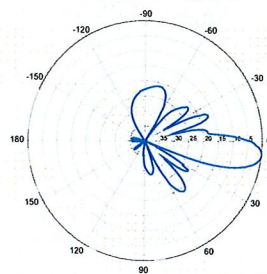
X-Pol | FET Panel | 40° | 16.0 dBd

BXA-70040-6CF-EDIN-6



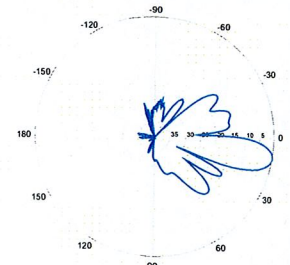
6° | Vertical | 750 MHz

BXA-70040-6CF-EDIN-8

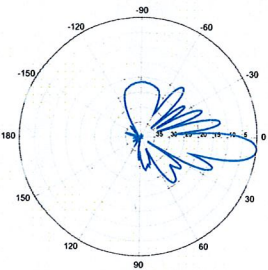


8° | Vertical | 750 MHz

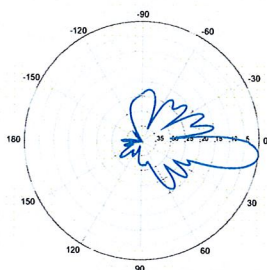
BXA-70040-6CF-EDIN-10



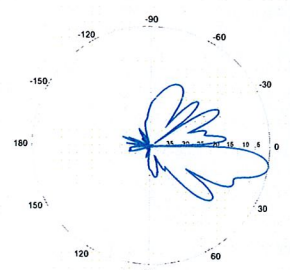
10° | Vertical | 750 MHz



6° | Vertical | 850 MHz



8° | Vertical | 850 MHz



10° | Vertical | 850 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

General Power Density

Site Name: Hartford West, CT
 Cumulative Power Density

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans. (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure* (mW/cm ²)	Fraction of MPE (%)
VZW PCS	1970	3	340	1020	99	0.0374	1.0	3.74%
VZW Cellular	869	9	343	3087	99	0.1133	0.579333	19.55%
VZW 700	757	1	879	879	99	0.0323	0.497333	6.49%
Total Percentage of Maximum Permissible Exposure								29.78%

*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/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used.

June 02, 2010

Mr. Jim Smith
Verizon Wireless
99 East River Drive
East Hartford, CT 06108

*Re: Structural Certification Letter ~ LTE Antenna Upgrade
Verizon Wireless Site Ref ~ Hartford West
600 Asylum Avenue,
Hartford, CT 06105*

Centek Project No. 10001.CO53

Dear Mr. Smith,

Centek Engineering, Inc. has reviewed the proposed Verizon Wireless LTE antenna upgrade at the above referenced site. The purpose of the review is to determine the structural adequacy of the existing ten (10) story, 110-ft +/- tall host building to support the proposed modified antenna configuration. The existing antenna installation consists of three (3) antenna sectors pipe mounted to three existing penthouse structures of the host building. The review considered the effects of wind load, dead load, ice load and seismic forces in accordance with TIA/EIA-222-F and the 2005 Connecticut State Building Code. Visual verification of the existing antenna installation was conducted by Centek Engineering personnel on April 02, 2010.

The existing, proposed and future Verizon Wireless loads considered in this analysis consist of the following:

- **Verizon (Existing to Remain/Relocated):**
Antennas: Six (6) Andrew DB844G65ZAXY and six (6) Andrew DB 948F65T2E-M panel antennas mounted to existing/modified antenna pipe mounts/sector frames with a RAD center elevation of 99-ft +/- and 108-ft+/-AGL.
Coax: Twelve (12) 1-5/8in dia. coaxial cables.
- **Verizon (Proposed):**
Antennas: Three (3) Antel BXA 70040/6CF-2 panel antennas mounted to existing/modified antenna pipe mounts/sector frames with RAD center elevations of 99-ft +/- and 108-ft+/-AGL.
Coaxial Cables: Six (6) 1-5/8" dia. coaxial cables to be routed within proposed roof/wall mounted cable trays.

CEN TEK engineering, INC.
Structural Certification Letter
Verizon Wireless ~ Hartford West
600 Asylum Avenue,
Hartford, CT 06105

Replacement of the existing Alpha, Beta and Gamma antenna pipe mounts/sector frames is required for the proposed antenna installation. Please refer to the attached construction drawings C-1, C-2, S-1 and S-2 prepared by Centek Engineering Inc; dated May 18, 2010.

With the aforementioned antenna mount modifications, the proposed antenna installation meets the requirements of the TIA/EIA-222-F Standard considering the basic wind speed (fastest mile) of 80 mph for Hartford County which controls over the basic wind speed (fastest mile) of 77.5 mph for Hartford (equivalent to 95 mph 3-second gust wind speed as required in Appendix K of the Connecticut supplement per Table 1609.3.1).

In conclusion, the proposed Verizon LTE antenna upgrade with the aforementioned antenna mount modifications will not negatively impact the structural integrity of the existing host building. If there are any questions regarding this matter, please feel free to call.

Respectfully Submitted by:


Carlo F. Centore, PE
Principal ~ Structural Engineer

