



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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E-Mail: siting.council@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

April 30, 2002

Mr. Christopher B. Fisher, Esq.
Cuddy & Feder & Worby
90 Maple Avenue
White Plains, NY 10601-5196

RE: **EM-AT&T-040-020412** – AT&T Wireless notice of intent to modify an existing telecommunications facility located at 56 Floydville Road, East Granby, Connecticut.

Dear Atty. Fisher:

At a public meeting held on April 25, 2002, 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[s] dated April 12, 2002. 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.

Very truly yours,


Mortimer A. Gelston
Chairman

MAG/DM/laf

c: Honorable David K. Kilbon, First Selectman, Town of East Granby
Mr. Mark Roberts, SBA, Inc.

RECEIVED

APR 12 2002

**NOTICE OF INTENT TO MODIFY AN
EXISTING TELECOMMUNICATIONS FACILITY
56 FLOYDVILLE ROAD, EAST GRANBY, CONNECTICUT**

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 56 Floydville Road, East Granby, Connecticut (the "Floydville Road Facility"), owned by the SBA, Inc., ("SBA"). AT&T Wireless and SBA have agreed to share the use of the Floydville Road Facility, as detailed below.

The Floydville Road Facility

The Floydville Road Facility consists of an approximately one hundred twenty (120) foot monopole (the "Tower") and associated equipment currently being used for wireless communications by Verizon. A chain link fence surrounds the Tower compound. The current adjacent land use is predominantly rural farming.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by URS Corporation, including a site plan and tower elevation of the Floydville Road Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets needed to provide personal communications services ("PCS") within the existing fenced compound. AT&T Wireless will install 6 panel antennas at approximately the 89 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76" H x 30" W x 30" D) located on a concrete pad. As evidenced in the letter of structural integrity prepared by URS Corporation, annexed hereto as Exhibit A, AT&T has confirmed that the tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

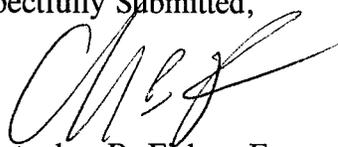
The proposed addition of AT&T Wireless' antennas and equipment to the Floydville Road Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the Tower will not result in an increase of the Tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. As set forth in an Emissions Report prepared by Frank Wentink, Radio Frequency Engineer, annexed hereto as Exhibit B, the total radio

frequency electromagnetic radiation power density at the Tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. For all the foregoing reasons, addition of AT&T Wireless' facility to the Tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

Conclusion

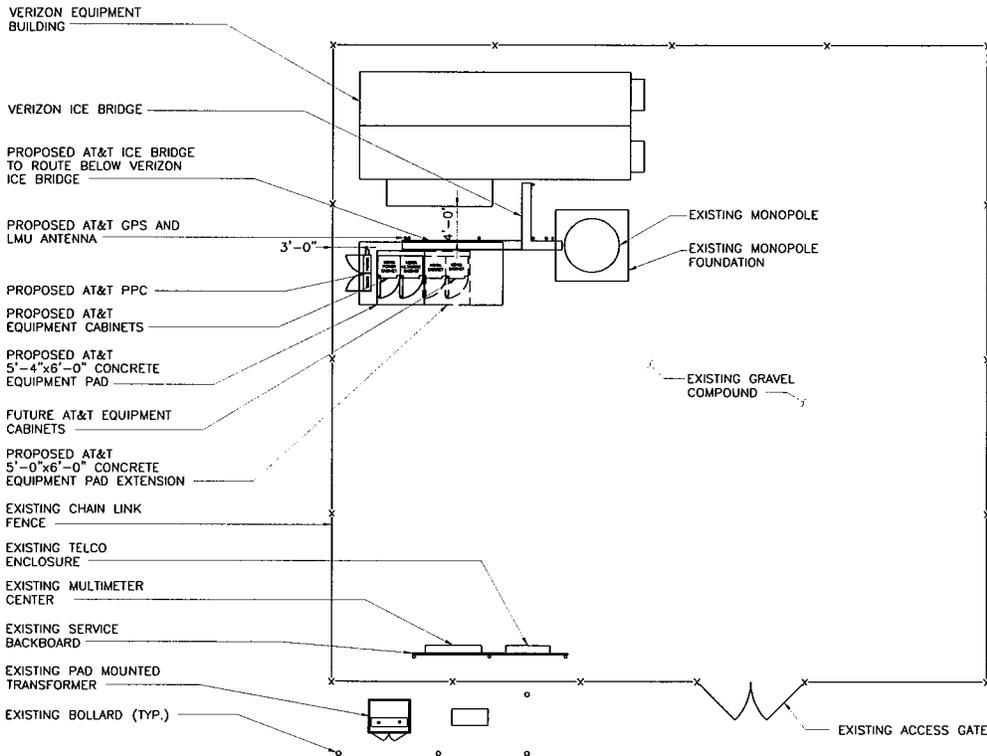
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Floydville Road Facility meets the Council's exemption criteria.

Respectfully Submitted,



Christopher B. Fisher, Esq.
On behalf of AT&T Wireless

cc: First Selectman, Town of East Granby
Harold Hewett, Bechtel
Mark Roberts, SBA



1 SITE PLAN
SC-1 SCALE: 1" = 20'-0"



LATITUDE: 41.92865 (NAD 83)
LONGITUDE: 72.77677 (NAD 83)

SCALE: AS NOTED DRAWN BY: VJB
DATE ISSUED: 03/12/02 CHECKED BY: JCF
APPROVED BY:

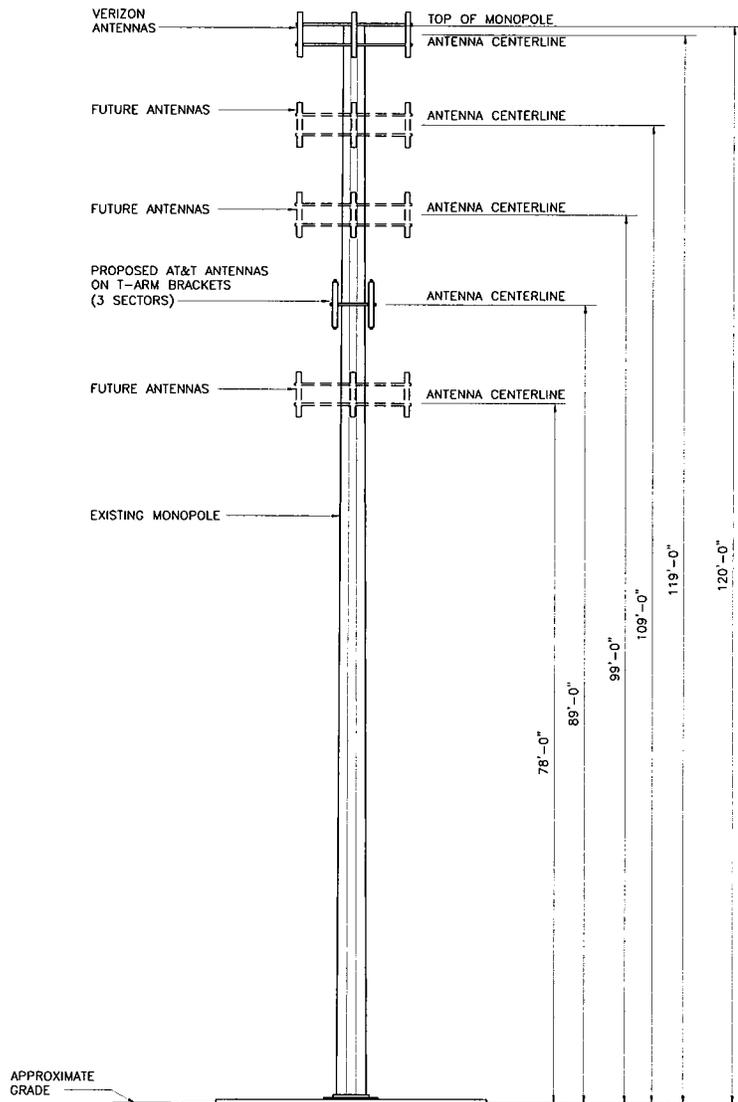
ISSUED FOR SITING COUNCIL

JOB NO.	SITE NO.	DRAWING NUMBER	REV.
24445	3C0-425	SC-1	0

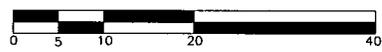
URS
URS CORPORATION-AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CT. 06067
1-(860)-529-8882
URS JOB NO.: F302224.13

 **AT&T**
AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06902

DRAWING TITLE: SITE PLAN
PROJECT INFORMATION: EAST GRANBY WEST
24445-3C0-425-SC1-0
56 FLOYDVILLE ROAD
EAST GRANBY, CONNECTICUT
PROPERTY OWNER: SBA, INC.
80 EASTERN BLVD.
GLASTONBURY, CONNECTICUT 06053



1 MONOPOLE ELEVATION
 SC-2 SCALE: 1" = 20'-0"



LATITUDE: 41.92865 (NAD 83)
 LONGITUDE: 72.77677 (NAD 83)

SCALE: AS NOTED DRAWN BY: VJB
 DATE ISSUED: 03/12/02 CHECKED BY: JCF
 APPROVED BY:

ISSUED FOR SITING COUNCIL

JOB NO.	SITE NO.	DRAWING NUMBER	REV.
24445	3C0-425	SC-2	0

URS
 URS CORPORATION-AES
 795 BROOK STREET, BLDG 5
 ROCKY HILL, CT. 06067
 1-(866)-529-8882
 URS JOB NO.: F302224.13

 **AT&T**
 AT&T WIRELESS PCS LLC
 12 OMEGA DRIVE
 STAMFORD, CONNECTICUT 06902

DRAWING TITLE: MONOPOLE ELEVATION
PROJECT INFORMATION: EAST GRANBY WEST
 24445-3C0-425-SC2-0
 58 FLOYDVILLE ROAD
 EAST GRANBY, CONNECTICUT
PROPERTY OWNER: SBA, INC.
 80 EASTERN BLVD.
 GLASTONBURY, CONNECTICUT 06053



March 25, 2002

Mr. Mortimer A. Gelston
Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

**Reference: Proposed Telecommunications Facility
AT&T Site No.: CT-425
56 Floydville Road
East Granby, Connecticut
F300002224.13**

Dear Mr. Gelston:

URS Corporation (URS) conducted a review and evaluated the existing monopole structure located at 56 Floydville Road in East Granby, Connecticut. The purpose of this review was to evaluate the affect of the proposed AT&T Wireless antennas and mount on the monopole structure. The monopole and its foundation were designed by Pirod Inc., File No.: A-118, 413-1. The monopole and its foundation were originally designed to support seven telecommunications carriers between the elevations of 80' - 140'. The tower was designed as 140' monopole but the last 20' section was not erected. The tower is currently constructed to an elevation of 120' and supports one carrier at the elevation of 119'. The proposed AT&T antennas and mount considered in this review are as listed below:

Antenna and Mount	Carrier	Antenna Center Elevation
(6) Allgon 7250.03 on (3) T-arms with (12) 1 5/8" coax cables within the monopole	AT&T	89'

This evaluation is based on the requirements that all antenna cables are to be placed within the monopole. It is our determination that the existing monopole and it's foundation have sufficient structural capacity to support the existing carrier and the AT&T installation as specified above. This evaluation is based on requirements of the TIA/EIA-222-F dated March 1996 and the Connecticut State Building Code dated 1996 and the latest supplement and amendments.

If you should have any questions, please call

Sincerely,
URS Corporation AES


Mohsen Sahirad, P.E.
Senior Structural Engineer



MS/mks

- cc: Donald Huntley, P.E. - Bechtel Telecommunications
- Christopher Fisher - Cuddy Feder Worby
- Ignacio C. Artaiz, AIA - URS
- Douglas J. Roberts, AIA - URS
- Alitz Abadjian, PM - URS
- CF/Book



RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

907-007-425

04/04/02

Prepared by AT&T Wireless Services, Inc.
Frank Wentink RF Engineer

Post-it® Fax Note	7671	Date	6/3/02	# of pages ▶	8
To	Kurt Shealhelm				
Co./Dept.	CSC				
Phone #					
Fax #	293-3555				

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1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at 56 Floydville Rd; East Granby, CT 06026. This analysis uses site-specific engineering data to determine the predicted levels of radio frequency (RF) electromagnetic energy in the vicinity of the proposed facility and compares those levels with the Maximum Permissible Exposure (MPE) limits established by the Federal Communications Commission.

2. Site Data

Site Name: East Granby West	
Number of simultaneously operating channels	16
Type of antenna	Allgon 7250.02
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	89 feet
Antenna Aperture Length	5 feet

3. RF Exposure Prediction

The following equations established by the FCC, in conjunction with the site data, were used to determine the levels of RF electromagnetic energy present in the vicinity of the proposed facility¹:

$$PowerDensity = \frac{0.64 * N * EIRP(\theta)}{\pi * R^2} (mw/cm^2) \quad Eq. 1-Far-field$$

Where, N = Number of channels, R = distance in cm from the RC (Radiation Center) of antenna, and $EIRP(\theta)$ = The isotropic power expressed in milliwatts in the direction of prediction point.

$$PowerDensity = \frac{P_{in} / ch * N * 10^3}{2 * \pi * R * h * \alpha / 360} (mw/cm^2) \quad Eq. 2-Near-field$$

Where P_{in}/ch = Input power to antenna terminals in watts/ch, R = distance to center of radiation, h = aperture height in meters, α = 3 dB band-width of horizontal pattern.

¹ RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts (μ W), a millionth of a watt, per square centimeter (cm^2). Data comparing predictive analysis with on site measurements has demonstrated that power density can be effectively predicted at given locations in the vicinity of a wireless antenna facility.

4. FCC Guidelines for Evaluating the Environmental Effects of RF Radiation

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by a Second Memorandum Opinion and Order. These new rules represent a consensus of the federal agencies responsible for the protection of public health and the environment, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Health and Safety (NIOSH), and the Occupational Safety and Health Administration (OSHA).

Under the laws that govern the delivery of wireless communications services in the United States, as amended by the Telecommunications Act of 1996, the FCC has exclusive jurisdiction over RF emissions from personal wireless antenna facilities, which include cellular, PCS, messaging and aviation sites.² Pursuant to its authority under federal law, the FCC has established rules to regulate the safety of emissions from these facilities.

5. Comparison with Standards

Exhibit A shows the levels of RF electromagnetic energy as one moves away from the antenna facility. As shown in Exhibit A, the maximum power density is $1.54 \mu\text{ W/cm}^2$ which occurs at 100 feet from the antenna facility. The chart in exhibit A also shows that the power density is only $0.08 \mu\text{ W/cm}^2$ at a distance of 4 feet. Table 1 below shows the Maximum Permissible Exposure (MPE) limits established by the FCC. There are different MPE limits for public/uncontrolled and occupational/controlled environments.

Table 1: Maximum Permissible Exposure limits for RF radiation

<i>Frequency</i>	<i>Public/Uncontrolled</i>	<i>Occupational/controlled</i>	<i>Maximum power density at Accessible location</i>
Cellular	$580 \mu\text{ W/cm}^2$	$2,900 \mu\text{ W/cm}^2$	$1.54 \mu\text{ W/cm}^2$
PCS	$1000 \mu\text{ W/cm}^2$	$5,000 \mu\text{ W/cm}^2$	

The maximum power density at the proposed facility represents only 0.20% of the public MPE limit.

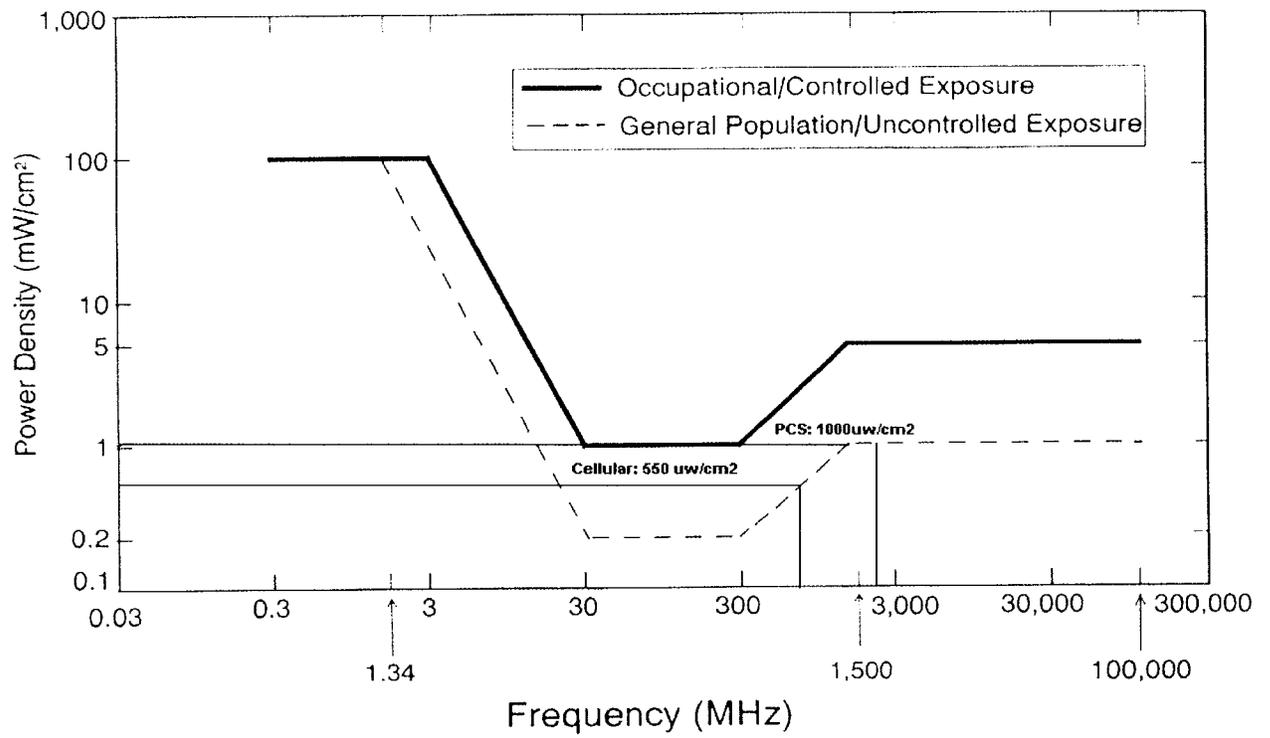
6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is $1.54 \mu\text{ W/cm}^2$, a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

² 47 U.S.C. Section 332 (c) (7)(B)(iv) states that “[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions.”

7. FCC Limits for Maximum Permissible Exposure

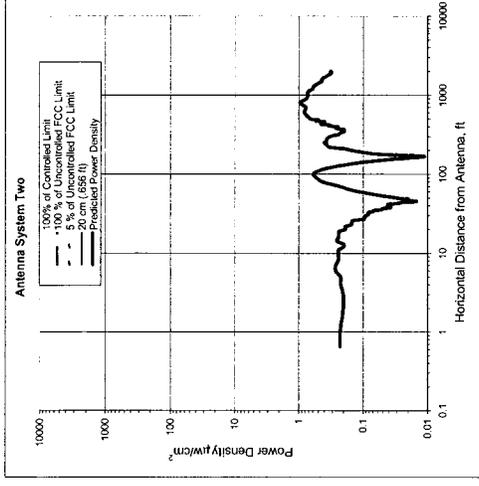
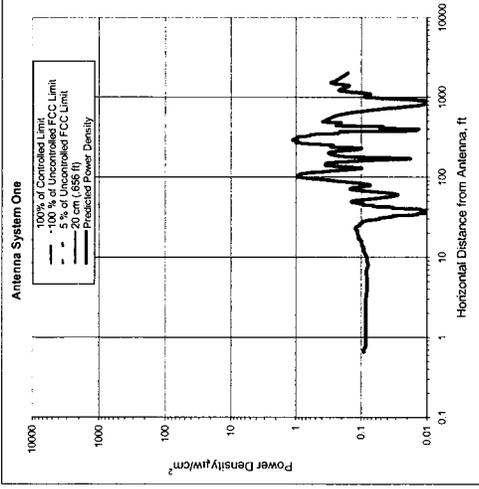
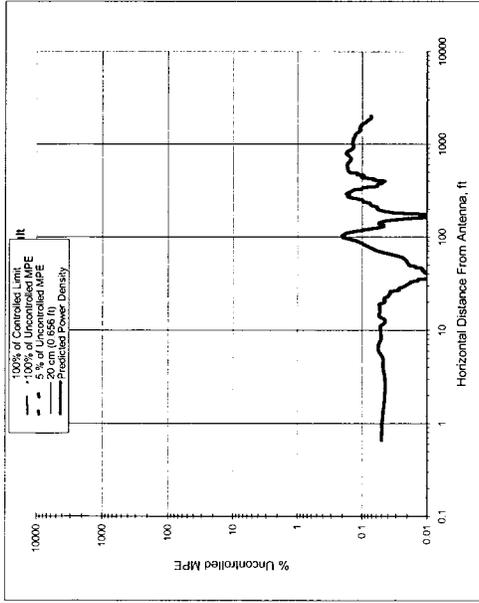
FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



AT&T Wireless Services, Inc.

8. Exhibit A

Heading



2

Number of Antenna Systems: 2
Meets FCC Controlled Limits for The Antennas Systems.

Meets FCC Uncontrolled Limits for The Antenna Systems.

Meets 5% of FCC Uncontrolled Limits for The Antenna Systems.

No Further Maximum Permissible Exposure (MPE) Analysis Required.

Power Density	µW/cm²	@Horiz. Dist.
Maximum Power Density =	1.54	% of limit
	0.20	feet
		100.00
496.87 times lower than the MPE limit for uncontrolled environment		
Composite Power (ERP) = 8,000.00 Watts		

Site ID: 907-007-425
Site Name: East Granby West
Site Location: 56 Floydville Rd, East Granby, CT 06026
Performed By: Frank Wentink
Date: 4/4/02

Antenna System One

Frequency	units	Value
# of Channels	MHz	1945
Max ERP/Ch	#	16
Max Pwr/Ch Into Ant.	Watts	250
(Center of Calculation Point or roof surface)	feet	5,59680285
	feet	89
	feet	0
	feet	0
	feet	0
No.		Alligon 7250.02
Max Ant Gain	dBd	16.5
Down tilt	degrees	0
Miscellaneous Att.	dB	0
Height of aperture	feet	5.11
Ant. HBW	degrees	65
Distance to Ant _{Reference}	feet	86.445
WOS?	Y/N?	n

Ant System ONE Owner: AT&T
Sector: 1
Azimuth: 0

Antenna System Two

Frequency	units	Value
# of Channels	MHz	835
Max ERP/Ch	#	16
Max Pwr/Ch Into Ant.	Watts	250
(Center of Calculation Point or roof surface)	feet	18,96443938
	feet	119
	feet	0
	feet	0
	feet	0
No.		FR90-11-00A2
Max Ant Gain	dBd	11.2
Down tilt	degrees	0
Miscellaneous Att.	dB	0
Height of aperture	feet	4
Ant. HBW	degrees	90
Distance to Ant _{Reference}	feet	117
WOS?	Y/N?	n

Ant System TWO Owner: Verizon
Sector: 1
Azimuth: 0

9. For Further Information

Additional information about the environmental impact of RF energy from personal wireless antenna facilities can be obtained from the Federal Communications Commission:

Dr. Robert Cleveland
Federal Communications Commission
Office of Engineering and Technology
Washington, DC 20554

RF Safety Program: 202-418-2464
Internet address: rfsafety@fcc.gov
RF Safety Web Site: www.fcc.gov/oet/rfsafety

10. References

- [1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).
- [2] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Notice of Proposed Rulemaking, ET Docket 93-62, 8 FCC Rcd 2849 (1993).
- [3] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Report and Order, ET Docket 93-62, FCC 96-326, adopted August 1, 1996. 61 Federal Register 41006 (1996).
- [4] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Second Memorandum Opinion and Order, ET Docket 93-62, adopted August 25, 1997.
- [5] *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields*, OET Bulletin 65, August, 1997.

TOWN OF EAST GRANBY

INCORPORATED 1858

PLANNING and ENGINEERING
PO BOX 1858 9 CENTER ST
EAST GRANBY, CONNECTICUT 06026
PHONE 1-860-653-3444 FAX 1-860-653-4017



April 22, 2002

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

Re: **EM-AT&T-040-020412** – AT&T Wireless notice of intent to modify an existing telecommunications facility located at 56 Floydville Rd., East Granby, Connecticut.

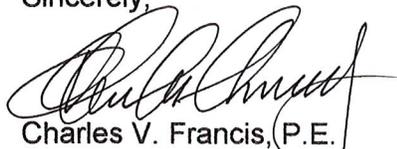
Dear Mr. Phelps:

The East Granby Planning & Zoning Commission approved the application of SBA Properties, Inc. on June 6, 2001 for the tower that is currently under construction. The tower was well sited by SBA and the Commission was aware of and supportive of future carrier antennas on the tower.

Since the proposal by AT&T is within the scope of the original TPZ approval we have no question or comments regarding the proposal except to point out that the building permit issued 9/21/01 limits the tower height to 80 feet pending SBA's furnishing satisfactory evidence of FAA acceptance of the full 120-foot tower height. SBA has offered no explanation for the FAA acceptance delay and construction remains suspended at the 80-foot level.

Thanks for giving the Town the opportunity to provide input.

Sincerely,



Charles V. Francis, P.E.
Town Engineer/Planner

Cc: David K. Kilbon, First Selectman
Rich Nelson, Building Official