



# 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@po.state.ct.us](mailto:siting.council@po.state.ct.us)

Web Site: [www.state.ct.us/csc/index.htm](http://www.state.ct.us/csc/index.htm)

April 10, 2002

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

RE: **EM-AT&T-027-020322** - AT&T Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 48 Cow Hill Road, Clinton, Connecticut.

Dear Attorney Fisher:

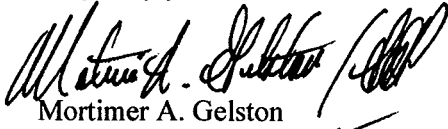
At a public meeting held on April 3, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received March 22, 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 may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point 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.

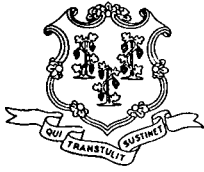
Very truly yours,



Mortimer A. Gelston

Chairman

c: James M. McCusker Jr., Mayor, Town of Clinton  
Stephen M. Howard, Nextel Communications, Inc.  
Kenneth C. Baldwin, Esq., Robinson & Cole LLC  
Peter W. van Wilgen, SNET Mobility, LLC  
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene, & MacRae



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March 27, 2002

Honorable James M. Mccusker, Jr.  
First Selectman  
Town of Clinton  
54 East Main Street  
Clinton, CT 06413

RE: **EM-AT&T-027-020322** - AT&T Wireless notice of intent to modify an existing telecommunications facility located at 48 Cow Hill Road, Clinton, Connecticut.

Dear Mr. Mccusker:

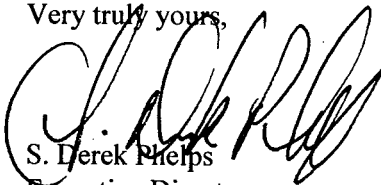
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for April 3, 2002, at 1:30 p.m. in Hearing Room Two, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps  
Executive Director

SDP/grg

Enclosure: Notice of Intent

c: Thomas Lane, Zoning Enforcement Officer, Town of Clinton

**RECEIVED**

**NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY  
48 COW HILL ROAD, CLINTON, CONNECTICUT**

**MAR 22 2002**

**CONNECTICUT  
SITING COUNCIL**

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 48 Cow Hill Road, Clinton, Connecticut (the "Cow Hill Road Facility") (Docket 148), owned by Crown Castle International ("Crown"). AT&T Wireless and Crown have agreed to share the use of the Cow Hill Road Facility, as detailed below.

**The Cow Hill Road Facility**

The Cow Hill Road Facility consists of an approximately two hundred twelve (212) foot lattice tower (the "Tower") and associated equipment currently being used for wireless communications by Verizon, Cingular, Sprint, Omnipoint, Nextel and emergency communications by the municipality. Additional carriers proposing to use the Cow Hill Road Facility include AT&T Wireless and Northcoast Communications (Boston PCS).<sup>1</sup> A chain link fence surrounds the Tower compound.

**AT&T Wireless' Facility**

As shown on the enclosed plans prepared by Natcomm, LLC., including a site plan and tower elevation of the Cow Hill 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 180 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76" H x 30" W x 30" D) located on the tower foundation within the existing fenced compound. As evidenced in a structural report prepared by All-Points Technology Corporation, PC, 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 Cow Hill 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

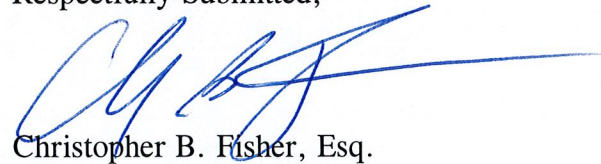
<sup>1</sup> The structural, tower elevation and MPE report all include antenna information regarding Northcoast's (Boston PCS) proposed shared use of the Cow Hill Road Facility for informational purposes only.

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**

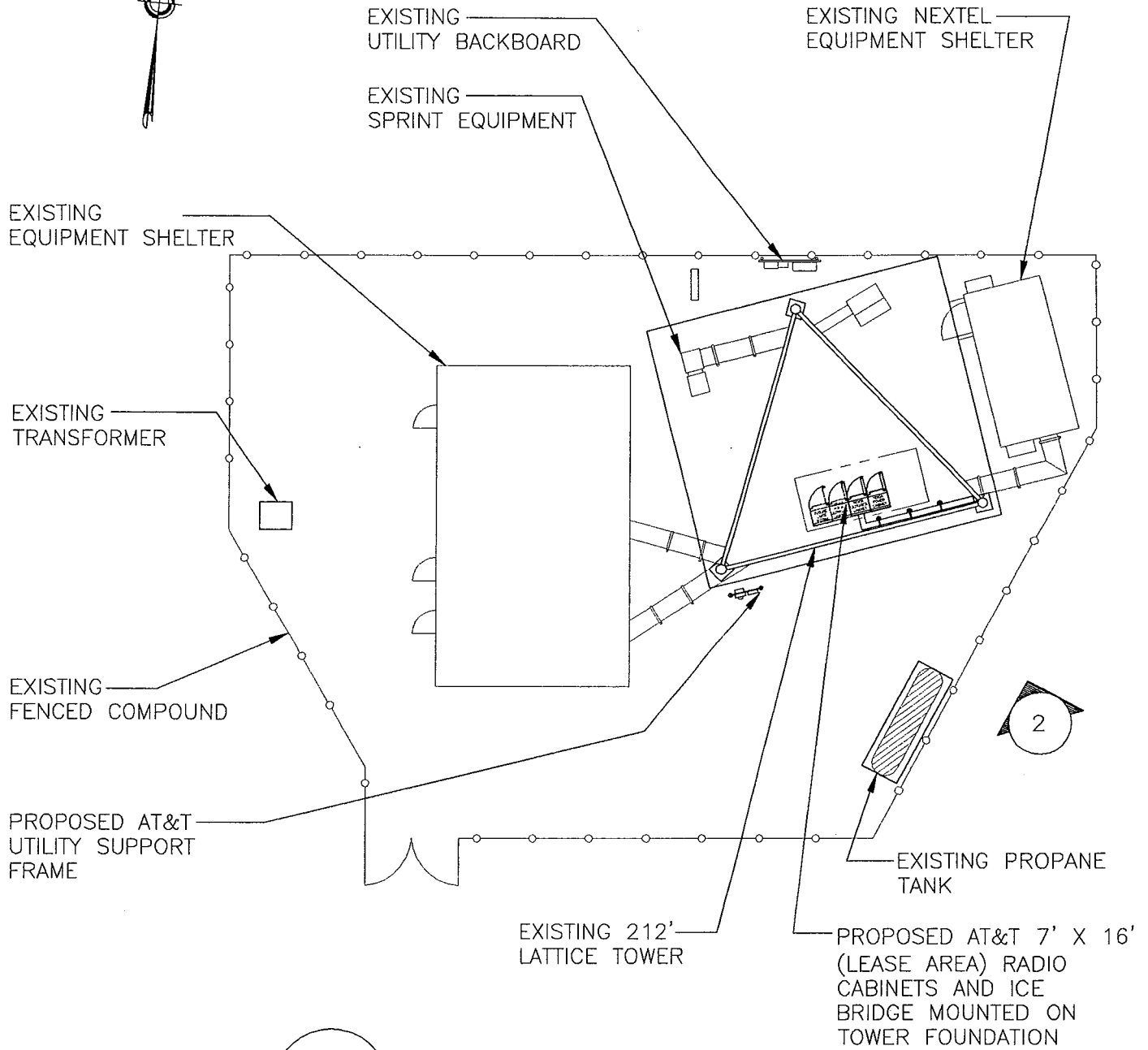
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Cow Hill Road Facility meets the Council's exemption criteria.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read 'C. B. Fisher', with a long horizontal line extending to the right.

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

cc: First Selectman, Town of Clinton  
Jane Fields, Bechtel  
Ken Baldwin, Esq.



# SITE PLAN

SCALE: 1" = 20'

NOTE:  
 LATITUDE: 41° 17' 19"  
 LONGITUDE: 72° 32' 21"

"ISSUED FOR SITING COUNCIL"



**Natcomm, LLC**

63-2 North Branford Road  
 Branford, Connecticut 06405

Tel. (203) 488-0580  
 Fax (203) 488-8587

Consulting Engineers-Project Management  
 Civil-Structural-Mechanical-Electrical



**AT&T**

AT&T WIRELESS PCS LLC  
 12 OMEGA DRIVE  
 STAMFORD, CONNECTICUT 06907

**DRAWING TITLE:**

SITING COUNCIL

**PROJECT INFORMATION:**

CLINTON CENTRAL  
 CT-207  
 48 COW HILL ROAD  
 CLINTON, CT 06413

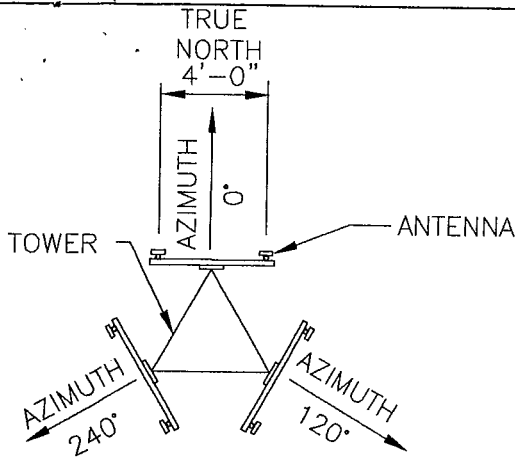
**PROPERTY OWNER:**

CROWN CASTLE  
 INTERNATIONAL  
 500 W. CUMMINGS PARK  
 WOBURN, MA. 01801

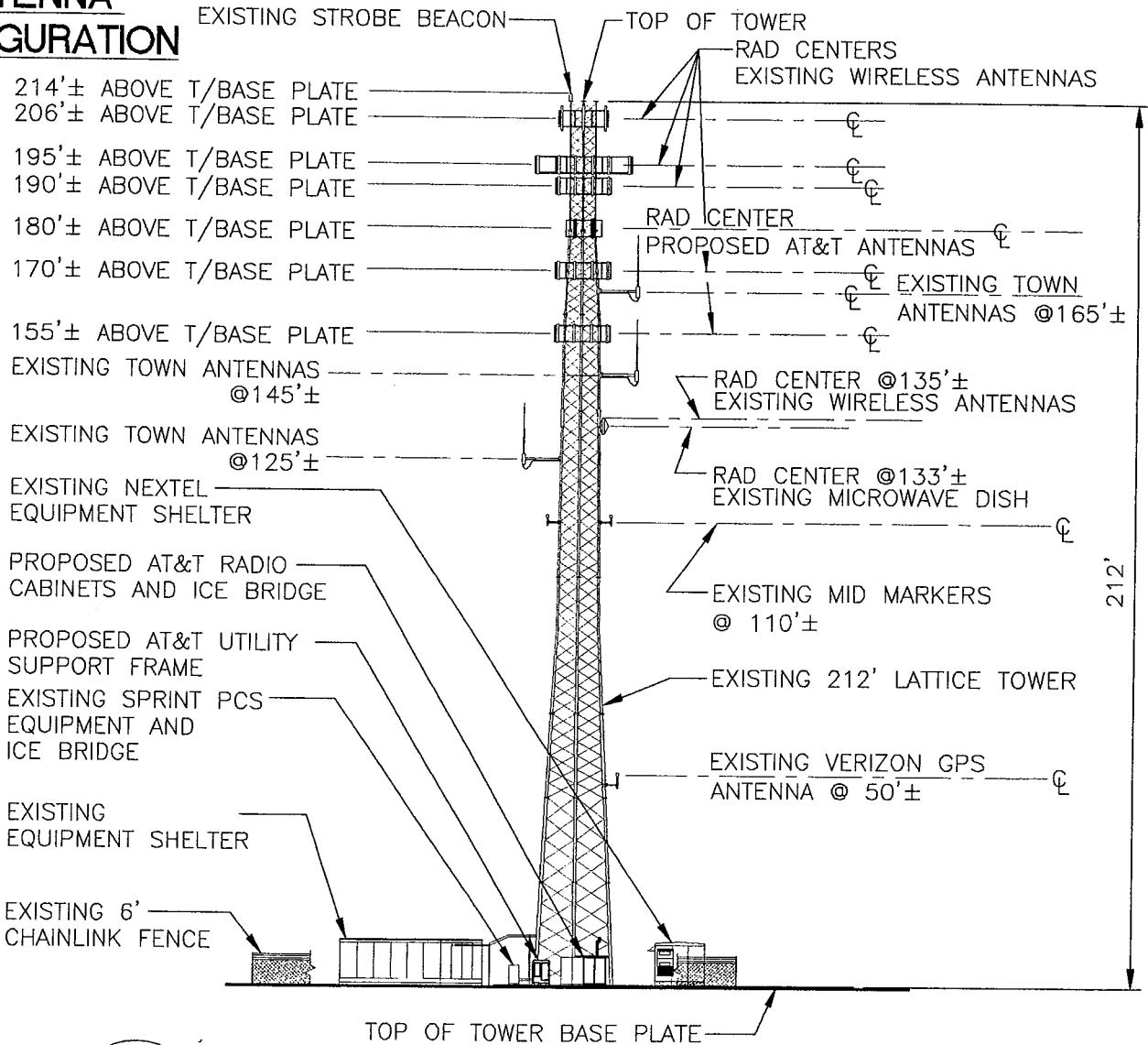
**DRAWING NO.**

**3CO-CT207-SC01-0**

REVISION NO. 0	DRAWN BY: P.A.M.
DATE ISSUED: 02/12/02	CHECKED BY: JJP
SCALE: AS NOTED	APPROVED BY: CFC
SHEET NO. 1 OF 2	
A/E PROJECT NO: 429A	



## ANTENNA CONFIGURATION



2

## TOWER ELEVATION

NOT TO SCALE

"ISSUED FOR SITING COUNCIL"

**Natcomm, LLC**  
63-2 North Branford Road  
Branford, Connecticut 06405  
Tel. (203) 488-0580  
Fax (203) 488-8587  
Consulting Engineers-Project Management  
Civil-Structural-Mechanical-Electrical

**AT&T**  
AT&T WIRELESS PCS LLC  
12 OMEGA DRIVE  
STAMFORD, CONNECTICUT 06907

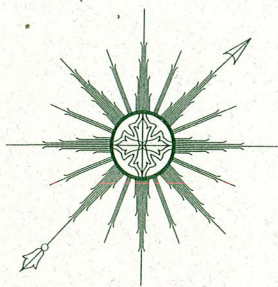
**DRAWING TITLE:** SITING COUNCIL  
**PROJECT INFORMATION:** CLINTON CENTRAL CT-207 48 COW HILL ROAD CLINTON, CT 06413  
**PROPERTY OWNER:** CROWN CASTLE INTERNATIONAL 500 W. CUMMINGS PARK WOBURN, MA. 01801

**DRAWING NO.**  
**3CO-CT207-SC02-0**

REVISION NO. 0	DRAWN BY: P.A.M.
DATE ISSUED: 02/12/02	CHECKED BY: JJP
SCALE: AS NOTED	APPROVED BY: CFC
SHEET NO. 2 OF 2	
A/E PROJECT NO: 429A	

File 184.448

CT.207  
- STRUCTURAL  
(CROWN)



**ALL-POINTS TECHNOLOGY CORPORATION, P.C.**

October 9, 2001

Crown Castle Atlantic  
500 West Cummings Park  
Suite 3400  
Woburn, MA 01801

Attn: Lincoln Erhard  
Re: AT&T Wireless & Northcoast Communications Antenna Additions  
212' ROHN SSMW Tower  
Clinton, Connecticut  
BU #806363

Dear Lincoln,

All-Points Technology Corp., P.C. performed a structural analysis of Crown Castle's 212' ROHN SSMW tower located at 48 Cow Hill Road in Clinton, Connecticut. The tower was analyzed in accordance with EIA/TIA-222-F, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures using a wind speed of 85-mph and 1/2" radial ice for the following:

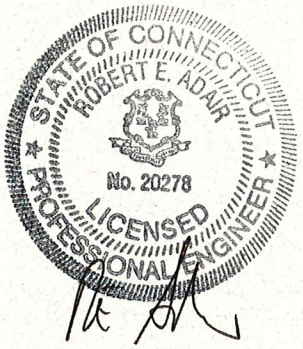
- AT&T: Addition of twelve ALP7184 panel antennas on three 15' sector mounts at 180'. Waveguide cables were assumed to be twelve 1-5/8" cables.
- Northcoast: Addition of six DAPA 48010 panel antennas and three Ericsson Minilink 4xT1 dishes on three 15' sector mounts at 155'. Waveguide cables were assumed to be six 1-5/8" cables and three 3/8" cables.

Our analysis indicates the tower and foundation will support the proposed antenna loads.

We appreciate this opportunity to provide you with our services. Please call if you have any questions.

Sincerely,  
**All-Points Technology Corp.**

Robert E. Adair, P.E.  
Principal



C:\Docs\Jobs\CT105390 Clinton ltr 10-9-01.doc



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**RF Exposure Analysis for Proposed  
AT&T Wireless Antenna Facility**

907-007-207

March 07, 2002

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



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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 48 Cow Hill Rd, Clinton, CT 06413. 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: <b>Clinton</b>	
Number of simultaneously operating channels	16
Type of antenna	7250.02
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	180 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 facility<sup>1</sup>:

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

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.

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

Where  $P_m/ch$  = Input power to antenna terminals in watts/ch,  $R$  = distance to center of radiation,  $h$  = aperture height in meters,  $\alpha$  = 3 dB band-width of horizontal pattern.

<sup>1</sup> RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts ( $\mu$  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.<sup>2</sup> 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 32.51  $\mu$  W/cm<sup>2</sup> which occurs at 1 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 11.95  $\mu$  W/cm<sup>2</sup> 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 $\mu$ W/cm <sup>2</sup>	2,900 $\mu$ W/cm <sup>2</sup>	32.51 $\mu$ W/cm <sup>2</sup>
PCS	1000 $\mu$ W/cm <sup>2</sup>	5,000 $\mu$ W/cm <sup>2</sup>	

The maximum power density at the proposed facility represents only 11.95% of the public MPE limit.

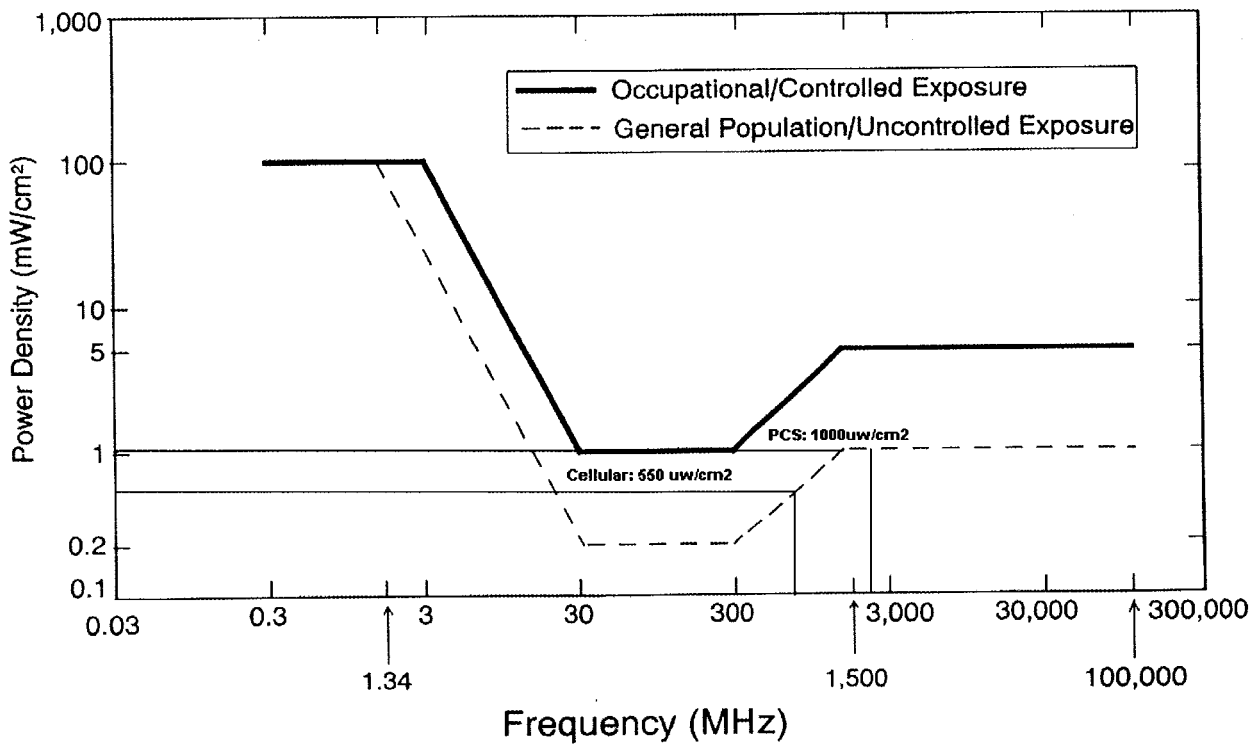
#### 6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 32.51  $\mu$  W/cm<sup>2</sup>, a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

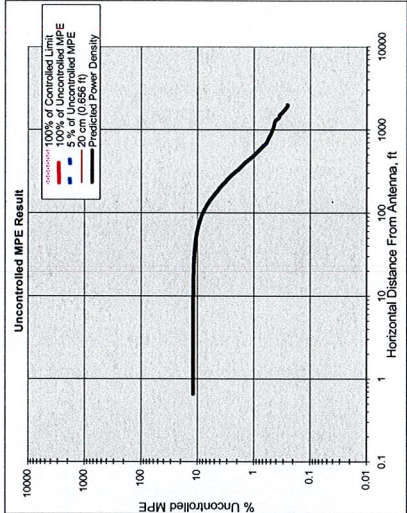
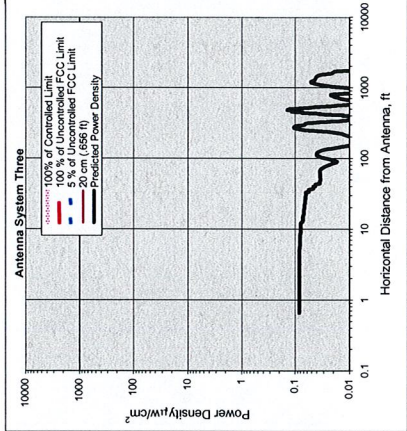
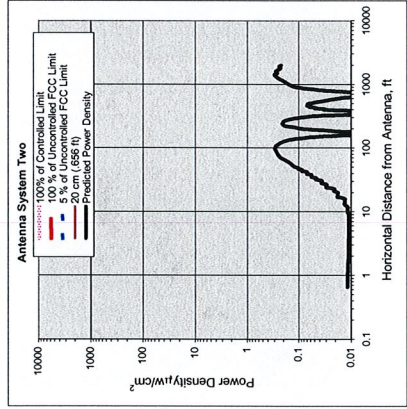
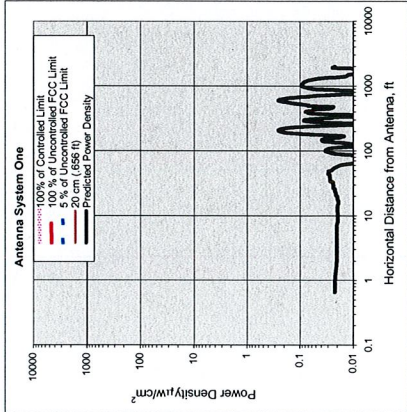
<sup>2</sup> 47 U.S. C. Section 332 ( c ) (7)(B)(iv) states that “[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the 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*



**8. Exhibit A**



Antenna System One

units	Value
Frequency	1965
# of Channels	16
Max ERP/Ch	250
Max Pwr/Ch Into Ant.	5.597
BS Height	198
(Center of Radiator)	0
Calculation Point	
(above ground or	
roof surface)	
Antenna Model No.	Aligon 7250.02
Max Ant Gain	16.5
Down tilt	0
Miscellaneous ATT	0
Height of aperture	5.11
Ant HBW	65
Distance to Ant <sub>max</sub>	177.445
WOS?	Y/N?
	n

Ant System ONE Owner: AT&T  
Sector: 3  
Azimuth: 0/120/240

Antenna System Two

units	Value
Frequency	890
# of Channels	16
Max ERP/Ch	250
Max Pwr/Ch Into Ant.	18.533
BS Height	208
(Center of Radiator)	0
Calculation Point	
(above ground or	
roof surface)	
Antenna Model No.	ALP9212
Max Ant Gain	11.3
Down tilt	0
Miscellaneous ATT	0
Height of aperture	4
Ant HBW	95
Distance to Ant <sub>max</sub>	206
WOS?	Y/N?
	n

Ant System TWO Owner: Verizon  
Sector: 3  
Azimuth: 0/120/240

Antenna System Three

units	Value
Frequency	1960
# of Channels	16
Max ERP/Ch	250
Max Pwr/Ch Into Ant.	7.726
BS Height	198
(Center of Radiator)	0
Calculation Point	
(above ground or	
roof surface)	
Antenna Model No.	DB990G9E-M
Max Ant Gain	15.1
Down tilt	0
Miscellaneous ATT	0
Height of aperture	5
Ant HBW	65
Distance to Ant <sub>max</sub>	194.5
WOS?	Y/N?
	n

Ant System Three Owner: Sprint  
Sector: 3  
Azimuth: 0/120/240

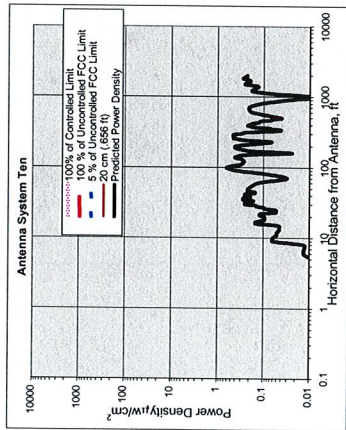
Number of Antenna Systems: 12  
Meets FCC Controlled Limits for The Antennas Systems.

Meets FCC Uncontrolled Limits for The Antenna Systems.

Meets 5% of the FCC Uncontrolled Limits beyond 170 feet from the Antenna Systems.

No Further Maximum Permissible Exposure (MPE) Analysis Required.

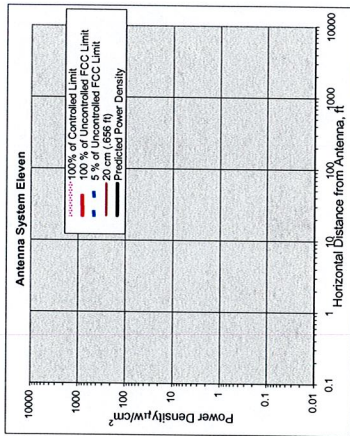
Power Density	µW/cm²	% of limit	@Horiz. Dist.
Maximum Power Density =	32.51	11.95	0.66
8.37 times lower than the MPE limit for uncontrolled environment.			
Compass Power (ERP) =	51,800.00	Watts	



Antenna System Ten

Parameter	Value	Units
Frequency	1974	MHz
# of Channels	16	
Max ERP/Ch	2591	Watts
Max Pow/Ch into Ant.	3.077	Watts
BS Height		feet
Calculation Point (Center of Radiation) (above ground or roof surface)	135	feet
Calculation Point (above ground or roof surface)	0	feet
Antenna Model No.	R9401702	
Max Ant Gain	14.4	dBi
Down Ill.	0	degrees
Miscellaneous Att.	0	dB
Height of Aperture	66	feet
Ant. H/W	50	degrees
Distance to Ant.	132.67	feet
WGS87	Y/N?	

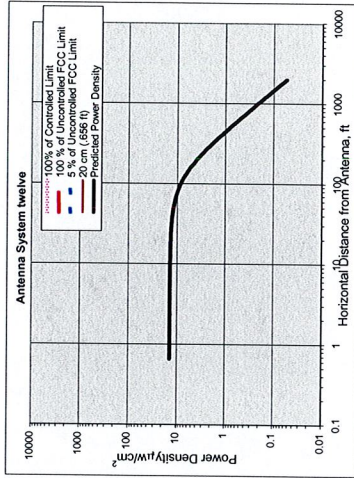
Ant System Four Owner: Omnipoint  
Sector: 3  
Azimuth: 0



Antenna System Eleven

Parameter	Value	Units
Frequency	6965	MHz
# of Channels	2	
Max ERP/Ch	5000	Watts
Max Pow/Ch into Ant.	0.500	Watts
BS Height		feet
Calculation Point (Center of Radiation) (above ground or roof surface)	133	feet
Calculation Point (above ground or roof surface)	0	feet
Antenna Model No.	Andrew LUX 10-55	
Max Ant Gain	40	dBi
Down Ill.	0	degrees
Miscellaneous Att.	0	dB
Height of Aperture	10	feet
Ant. H/W	13	degrees
Distance to Ant.	128	feet
WGS87	Y/N?	

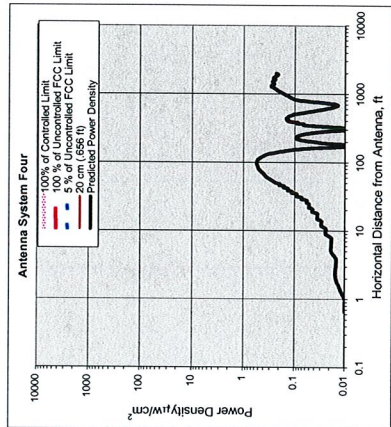
Ant System Five Owner: BAM  
Sector: 1  
Azimuth: 55



Antenna System Twelve

Parameter	Value	Units
Frequency	46	MHz
# of Channels	6	
Max ERP/Ch	100	Watts
Max Pow/Ch into Ant.	164.059	Watts
BS Height		feet
Calculation Point (Center of Radiation) (above ground or roof surface)	125	feet
Calculation Point (above ground or roof surface)	0	feet
Antenna Model No.	DB201	
Max Ant Gain	21.5	dBi
Down Ill.	0	degrees
Miscellaneous Att.	0	dB
Height of Aperture	9	feet
Ant. H/W	360	degrees
Distance to Ant.	120.5	feet
WGS87	Y/N?	

Ant System Six Owner: TOWN  
Sector: 1  
Azimuth: 0



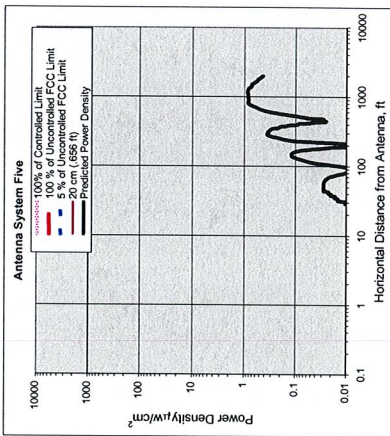
Antenna System Four

Parameter	Value	Units
Frequency	800	MHz
# of Channels	16	
Max ERP/Ch	250	Watts
Max Pwr/Ch Into Ant	22,800	Watts
BS Height (Center of Radiator)	160	feet
Calculation Point (above ground or roof surface)	0	feet
Antenna Model No	7120-16	
Max Ant Gain	10.4	dBi
Down Ill	0	degrees
Miscellaneous Att	0	dB
Height of aperture	5	feet
Ant HBM	90	degrees
Distance to Ant <sub>Maximum</sub>	187.5	feet
WGSS?	n	Y/N?

Ant System Four Owner: SNET

Sector: 3

Azimuth: 0120/240



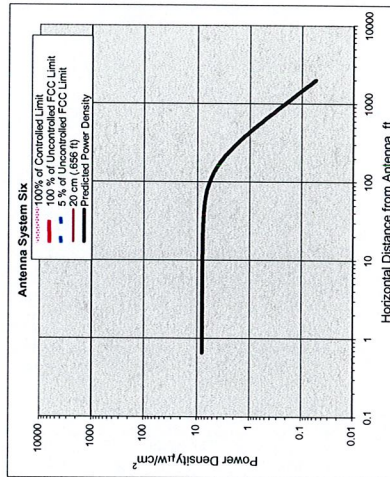
Antenna System Five

Parameter	Value	Units
Frequency	24	MHz
# of Channels	24	
Max ERP/Ch	250	Watts
Max Pwr/Ch Into Ant	18,633	Watts
BS Height (Center of Radiator)	170	feet
Calculation Point (above ground or roof surface)	0	feet
Antenna Model No	SC-9012	
Max Ant Gain	11.3	dBi
Down Ill	0	degrees
Miscellaneous Att	0	dB
Height of aperture	4	feet
Ant HBM	95	degrees
Distance to Ant <sub>Maximum</sub>	168	feet
WGSS?	n	Y/N?

Ant System Five Owner: Nodel

Sector: 3

Azimuth: 0120/240



Antenna System Six

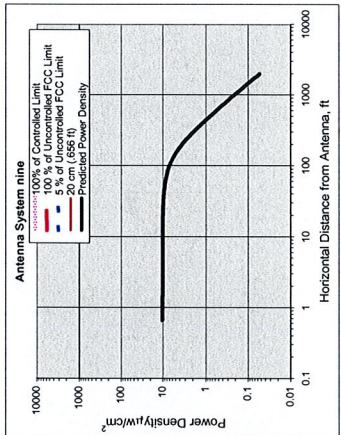
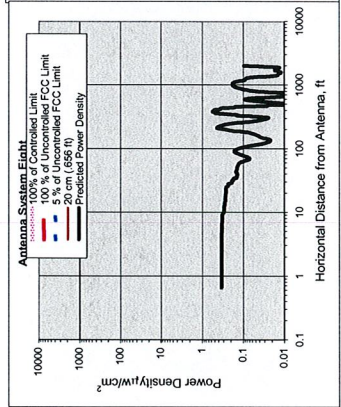
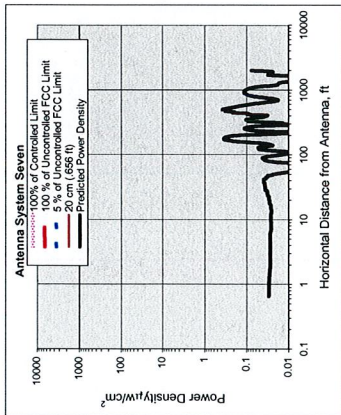
Parameter	Value	Units
Frequency	46	MHz
# of Channels	46	
Max ERP/Ch	100	Watts
Max Pwr/Ch Into Ant	184,059	Watts
BS Height (Center of Radiator)	185	feet
Calculation Point (above ground or roof surface)	0	feet
Antenna Model No	DB201	
Max Ant Gain	-2.15	dBi
Down Ill	0	degrees
Miscellaneous Att	0	dB
Height of aperture	9	feet
Ant HBM	360	degrees
Distance to Ant <sub>Maximum</sub>	160.5	feet
WGSS?	n	Y/N?

Ant System Six Owner: TOWN

Sector: 1

Azimuth: 0





Antenna System Seven

Parameter	Value
Frequency	1920
# of Channels	16
Max ERP/Ch	290
Max Pow/Ch into Ant. (Center of Radiator)	5.997
Calculation Point (above ground or roof surface)	0
Antenna Model No.	Alibon 7250.02
Max Ant Gain	16.5
Down tilt	0
Miscellaneous Att.	0
Height of aperture	5.11
Ant HBW	65
Distance to Antenna	152.445
WGS84	Y/N/T

Ant System ONE Owner: Boston PCS  
Sector: 301/50/270  
Azimuth: 301/50/270

Antenna System Eight

Parameter	Value
Frequency	22000
# of Channels	2
Max ERP/Ch	5000
Max Pow/Ch into Ant. (Center of Radiator)	154.515
Calculation Point (above ground or roof surface)	0
Antenna Model No.	DB9KQ5ME-AM
Max Ant Gain	15.1
Down tilt	0
Miscellaneous Att.	0
Height of aperture	5
Ant HBW	65
Distance to Antenna	152.5
WGS84	Y/N/T

Ant System TWO Owner: Boston PCS  
Sector: 301/50/265  
Azimuth: 301/50/265

Antenna System Nine

Parameter	Value
Frequency	46
# of Channels	6
Max ERP/Ch	100
Max Pow/Ch into Ant. (Center of Radiator)	164.059
Calculation Point (above ground or roof surface)	0
Antenna Model No.	DB201
Max Ant Gain	-2.15
Down tilt	0
Miscellaneous Att.	0
Height of aperture	9
Ant HBW	360
Distance to Antenna	140.5
WGS84	Y/N/T

Ant System Three Owner: TOWN  
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](mailto:rfsafety@fcc.gov)  
RF Safety Web Site: [www.fcc.gov/oet/rfsafety](http://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.