

**NOTICE OF INTENT TO MODIFY AN
EXISTING TELECOMMUNICATIONS FACILITY
181 A NORMAN ROAD, GRISWOLD, 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 181 A Norman Road, Griswold, Connecticut (the "Norman Road Facility"), owned by Crossroads Site Management. AT&T Wireless and the tower owner have agreed to share the use of the Norman Road Facility, as detailed below.

RECEIVED

MAY - 1 2002

**CONNECTICUT
SITING COUNCIL**

The Norman Road Facility

The Norman Road Facility consists of an approximately one hundred sixty (160) foot lattice tower (the "Tower") and associated equipment currently being used for wireless communications by Verizon, VoiceStream and the municipality. The surrounding land remains largely undeveloped.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Scientel, including a site plan and tower elevation of the Norman Road Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets within the existing fenced compound needed to provide personal communications services ("PCS"). AT&T Wireless will install 6 panel antennas at approximately the 138 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 Scientel, annexed hereto as Exhibit A, AT&T has confirmed that the tower is structurally capable, with minor modifications, 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 Norman 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 Satish Bhandare, 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 Norman Road Facility meets the Council's exemption criteria.

Respectfully Submitted,

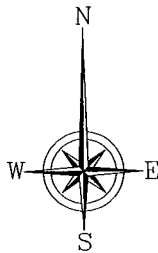
A handwritten signature in blue ink, appearing to read 'C. Fisher', is written over the typed name.

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

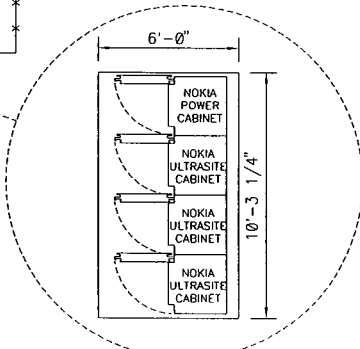
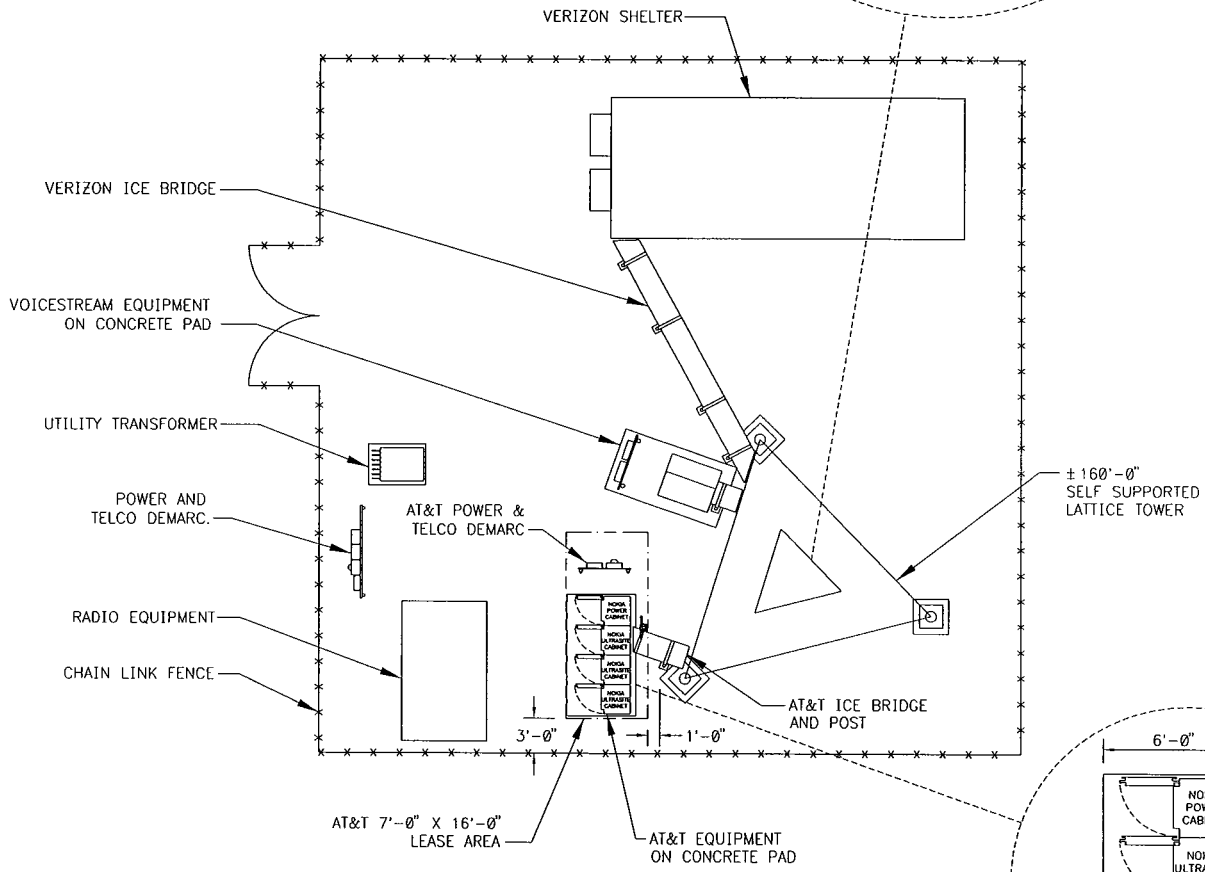
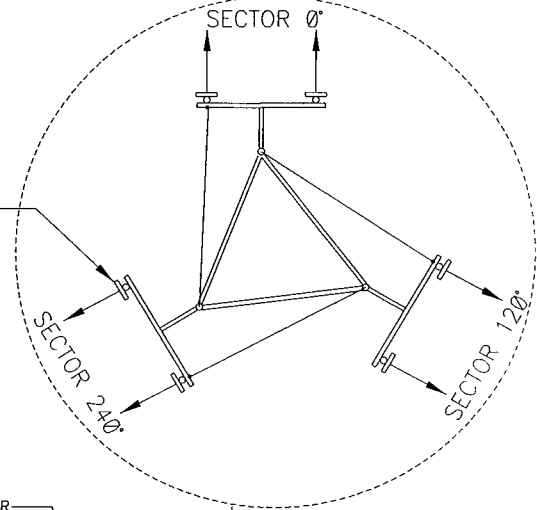
cc: First Selectman, Town of Griswold
Harold Hewett, Bechtel

NOTE:

- EXISTING ANTENNAS NOT SHOWN FOR CLARITY.



AT&T ANTENNA FRAMES WITH (6) ANTENNAS



SITE PLAN

SCALE: 1" = 15'-0"

1
SC1



THE BLEACHERY
143 WEST STREET
NEW MILFORD, CT. 06776
Tel: (860) 210-3020
Fax: (860) 210-3047



AT&T WIRELESS PCS, LLC
149 EAST WATER STREET
SOUTH NORWALK, CT. 06855

DRAWING TITLE:

SITING COUNCIL

PROJECT INFORMATION:

NE SITE MANAGEMENT
CT-457B
181 A NORMAN ROAD
GRISWOLD, CT 06351

PROPERTY OWNER:

NEW ENGLAND SITE MANAGEMENT
1050 BUCKLEY HIGHWAY
UNION, CT.

DRAWING NO.

SC1

REVISION NO. B	DRAWN BY. J1
DATE ISSUED: 03/25/02	CHECKED BY: RP
SCALE: 1" = 15'-0"	APPROVED BY: SC
SHEET NO 1 OF 2	
A/E PROJECT NO: 17447-0001	

FIRE DEPT. WHIP ANTENNAS
EL = ±160'-0"

VERIZON ANTENNAS
EL = ±158'-0"

VOICESTREAM ANTENNAS
EL = ±148'-0"

AT&T ANTENNAS
EL = 138'-0"

GPS ANTENNA
EL = 75'-0"±

FIRE DEPT. WHIP ANTENNA
EL = 60'-0"±

VERIZON ICE BRIDGE
AT&T ICE BRIDGE & POST
AT&T GSM & LMU ANTENNAS
AT&T EQUIPMENT ON CONCRETE PAD
AT&T POWER & TELCO DEMARC
RADIO EQUIPMENT
POWER AND TELCO DEMARC.

SELF SUPPORTED LATTICE TOWER
VOICESTREAM EQUIPMENT
VERIZON SHELTER
CHAIN LINK FENCE

GRADE
EL = 0'-0"

160'-0"±

SOUTH ELEVATION

SCALE: 1/16" = 1'-0"

1
SC2

SCIENTEL.
THE BLEACHERY
143 WEST STREET
NEW MILFORD, CT. 06776
Tel: (860) 210-3020
Fax: (860) 210-3047

AT&T
AT&T WIRELESS PCS, LLC
149 EAST WATER STREET
SOUTH NORWALK, CT. 06855

DRAWING TITLE: SITING COUNCIL
PROJECT INFORMATION:
NE SITE MANAGEMENT
CT-457B
181 A NORMAN RD.
GRISWOLD, CT. 06351

PROPERTY OWNER:
NEW ENGLAND SITE MANAGEMENT
1050 BUCKLEY HIGHWAY
UNION, CT.

DRAWING NO.
SC2

REVISION NO.	B	DRAWN BY:	JT
DATE ISSUED:	3/25/02	CHECKED BY:	RP
SCALE:	1/16" = 1'-0"	APPROVED BY:	SC
		SHEET NO.	2 OF 2
A/E PROJECT NO:		17447-0001	



A SCIENTECH, Inc., Company

April 15, 2002

Mr. Don Huntley
Bechtel Telecommunications
210 Pomeroy Avenue, Suite 201
Meriden, CT 06450

SUBJECT: Site Name: Griswold
 Street Address: 181 A Norman Road
 Griswold, CT 06351
 AT & T Site Number: CT-457
 Scientel Project Number: 17477-0001

Dear Mr. Huntley:

The structural design calculations for the Griswold site have been prepared under my direct supervision and are in compliance with the governing Building Codes for these jurisdictions, and with accepted recognized engineering design principles.

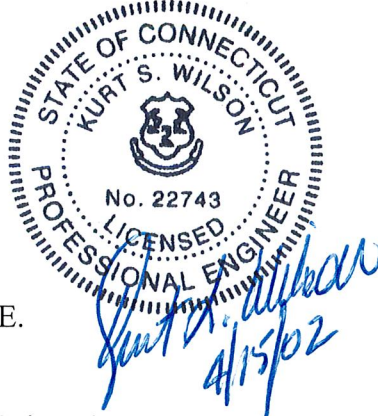
Tower modifications will be required. The diagonal members in the section from 80' above grade to 100' above grade will need to be removed and replaced with larger angles. Details for this modification are provided on the site construction drawings.

This design provides for the installation of (6) antennas on (3) Dual Standoff Mount support brackets at a centerline height of 138' on the existing 160' Rohn lattice self-supporting structure. The self-supporting structure was analyzed with the current antenna loadings at centerline heights of 158', 148', and 75' and whip antennas with heights to the bottom of the antennas of 160' and 60'.

Please feel free to call me if you have any further questions or comments. I can be reached directly at 630-652-3833.

Sincerely,
ScienTel, LLC

Kurt S. Wilson, P.E.
Engineer



Cc: S. Cook – Scintel LLC, CT



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

SITE ID: 907-009-457

March 08, 2002

**Prepared by AT&T Wireless Services, Inc.
Satish Bhandare, 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 181A Norman Rd, Rte 12, Plainfield, CT 06374. 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: Griswold East	
Number of simultaneously operating channels	12
Type of antenna	Allgon 7250.02
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	135 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 (μW), 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 .000267 mW/cm² which occurs at 150 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.02 μ W/cm² 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 μ W/cm ²	2,900 μ W/cm ²	.000267 mW/cm ²
PCS	1000 μ W/cm ²	5,000 μ W/cm ²	

The maximum power density at the proposed facility represents only 0.99% of the public MPE limit.

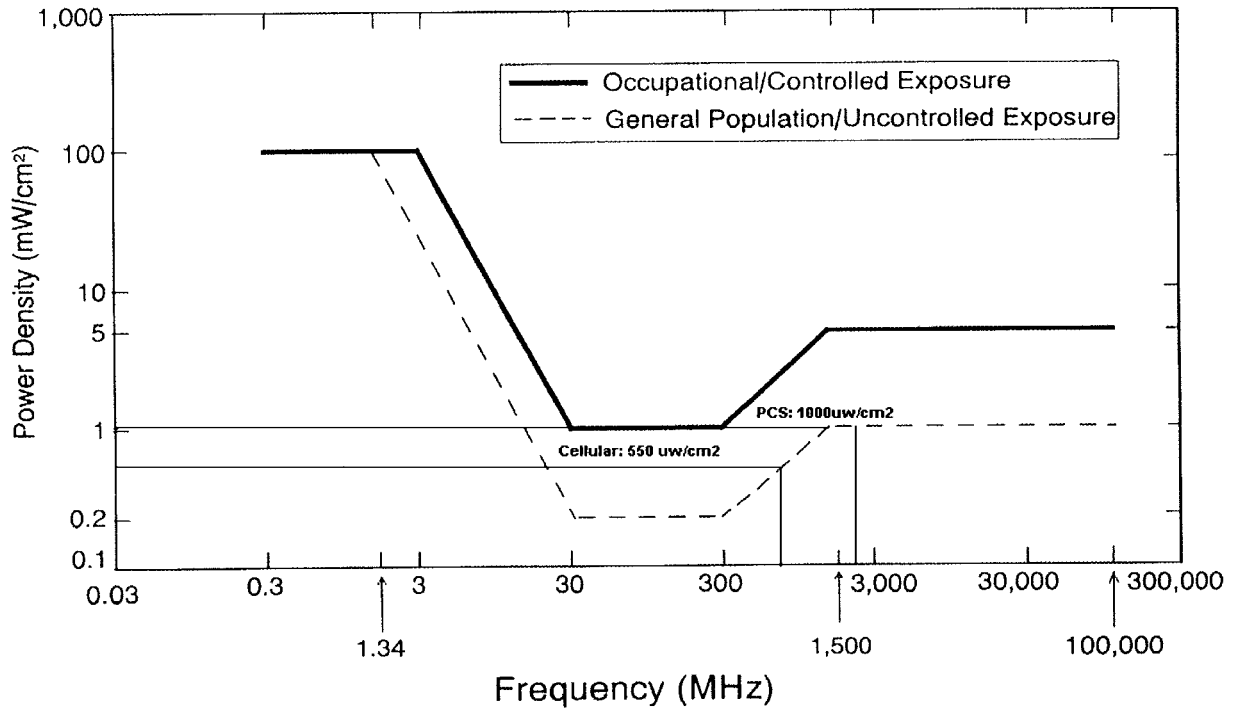
6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is .000267 mW/cm², 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

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

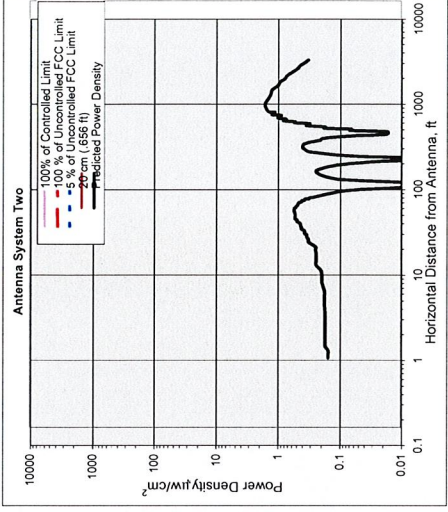
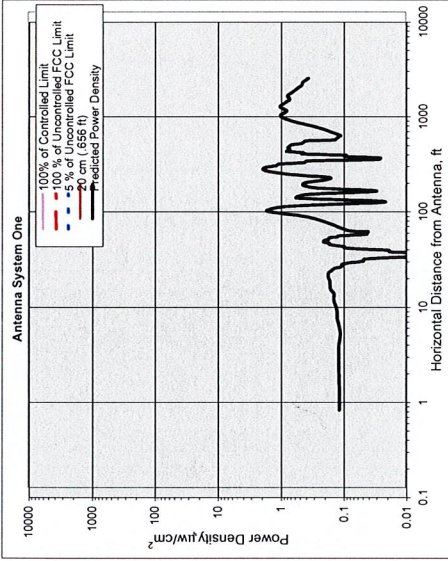
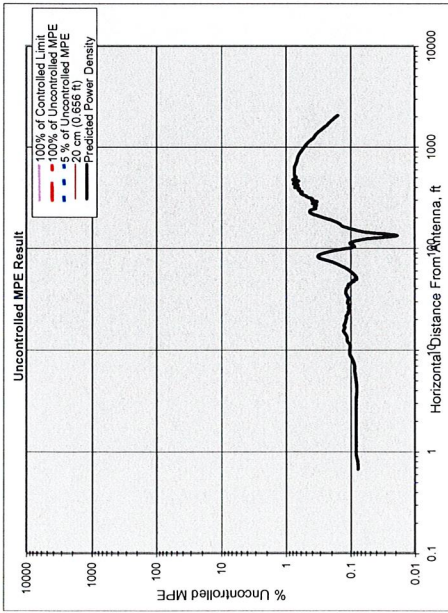
[1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).

[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.



Number of Antenna Systems: 7
 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	mW/cm²	% of limit
Maximum Power Density =	0.002671	0.99
101.41 times lower than the MPE limit for uncontrolled environment		
Composite Power (ERP) =	12,900.00	Watts

Site ID: CT-457
 Site Name: Grisvold East
 Site Location: 181 A Norman St, Griswold, CT 06351

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

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

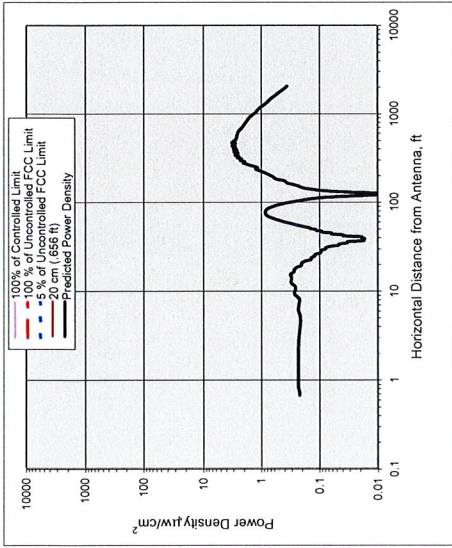
Antenna System One

Frequency	units	Value
Frequency	MHz	1945.00
# of Channels	#	12
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	5.60
(Center of Radiator)	feet	135.00
Calculation Point	feet	0.00
(above ground or roof surface)	feet	0.00
Antenna Model No.		Alligon 7250.02
Max Ant Gain	dBd	16.50
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Ant _{beam}	feet	132.45
WOS?	Y/N?	n

*Ant
 3' difference
 center line*

Antenna System Two

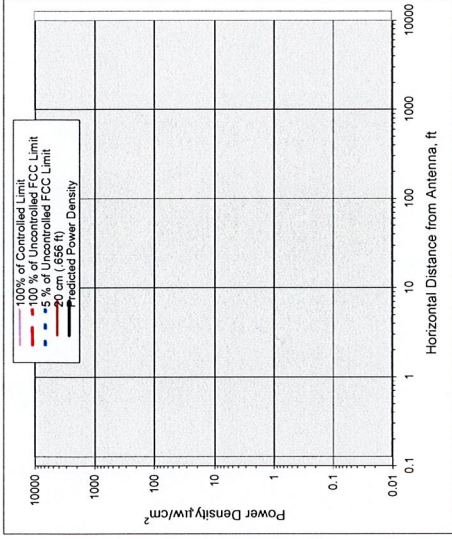
Frequency	units	Value
Frequency	MHz	1965.00
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	9.08
(Center of Radiator)	feet	148.00
Calculation Point	feet	0.00
(above ground or roof surface)	feet	0.00
Antenna Model No.		RR901702
Max Ant Gain	dBd	14.40
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.66
Ant HBW	degrees	90.00
Distance to Ant _{beam}	feet	145.67
WOS?	Y/N?	n



Antenna System Three

Parameter	units	Value
Frequency	MHz	890.00
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch into Ant.	Watts	18.53
(Center of Radiator)	feet	158.00
Calculation Point	feet	0.00
(above ground or roof surface)	feet	0.00
Antenna Model No.		ALP9011
Max Ant Gain	dBd	11.30
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.00
Ant HBW	degrees	95.00
Distance to Ant _{Maximum}	feet	156.00
WOS?	Y/N?	n

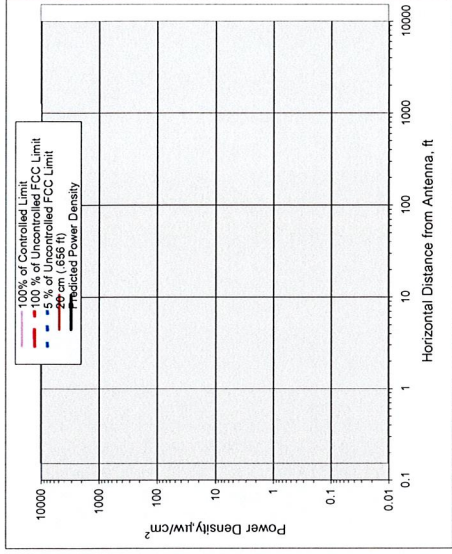
Ant System Three Owner: Verizon
Sector: 1
Azimuth: 0



Antenna System Four

Parameter	units	Value
Frequency	MHz	33.00
# of Channels	#	4
Max ERP/Ch	Watts	300.00
Max Pwr/Ch into Ant.	Watts	300.00
(Center of Radiator)	feet	160.00
Calculation Point	feet	0.00
(above ground or roof surface)	feet	0.00
Antenna Model No.		DB201
Max Ant Gain	dBd	0.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	8.00
Ant HBW	degrees	360.00
Distance to Ant _{Maximum}	feet	156.00
WOS?	Y/N?	n

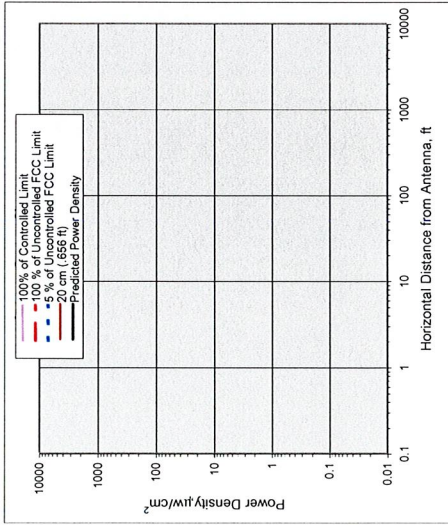
Ant System Four Owner: Fire Dept
Sector: 1
Azimuth: 0



Antenna System Five

Parameter	units	Value
Frequency	MHz	458.00
# of Channels	#	2
Max ERP/Ch	Watts	200.00
Max Pwr/Ch into Ant.	Watts	20.00
(Center of Radiator)	feet	160.00
Calculation Point	feet	0.00
(above ground or roof surface)	feet	0.00
Antenna Model No.		DB413
Max Ant Gain	dBd	10.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	18.50
Ant HBW	degrees	360.00
Distance to Ant _{Maximum}	feet	150.75
WOS?	Y/N?	n

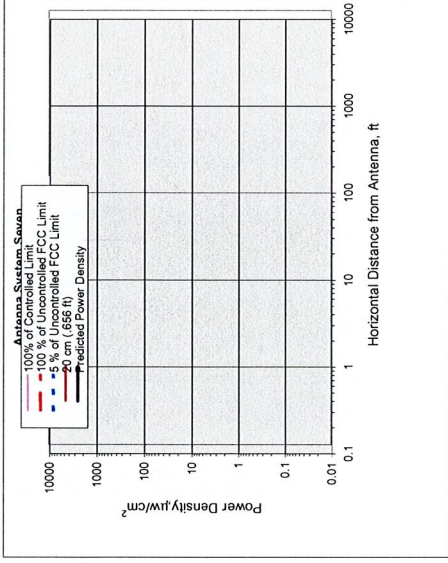
Ant System Five Owner: Fire Dept
Sector: 1
Azimuth: 0



Antenna System Six

	units	Value
Frequency	MHz	152.00
# of Channels	#	1
Max ERP/Ch	Watts	200.00
Max Pwr/Ch Into Ant. (Center of Radiator)	Watts	50.24
Calculation Point (above ground or roof surface)	feet	160.00
Calculation Point (above ground or roof surface)	feet	0.00
Antenna Model No.		PD440
Max Ant Gain	dBd	6.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	11.50
Ant. HBW	degrees	360.00
Distance to Ant. base	feet	154.25
WOS?	Y/N?	n

Ant System SIX Owner: Fire Dept
Sector: 1
Azimuth: 0



Antenna System Seven

	units	Value
Frequency	MHz	76.00
# of Channels	#	1
Max ERP/Ch	Watts	100.00
Max Pwr/Ch Into Ant. (Center of Radiator)	Watts	100.00
Calculation Point (above ground or roof surface)	feet	60.00
Calculation Point (above ground or roof surface)	feet	0.00
Antenna Model No.		DB201
Max Ant Gain	dBd	0.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	8.00
Ant. HBW	degrees	360.00
Distance to Ant. base	feet	56.00
WOS?	Y/N?	n

Ant System SEVEN Owner: Fire Dept
Sector: 1
Azimuth: 0

AT&T - 181A Norman Road, Griswold 5/20/02

