



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

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

May 10, 2002

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

RE: **EM-AT&T-023-020415** - AT&T Wireless notice of intent to modify an existing telecommunications facility located at 14 Canton Springs Road, Canton, Connecticut.

Dear Attorney Fisher:

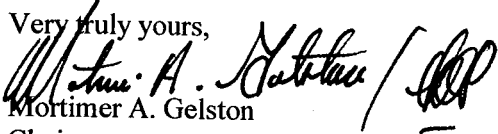
At a public meeting held on May 7, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received April 15, 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 Mary B. Tomolonius, First Selectman, Town of Canton
- Frederick E. Turkington, Jr., Chief Administrative Officer, Town of Canton
- Eric Barz, Town Planner, Town of Canton
- Sandy M. Carter, Verizon Wireless
- Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC
- Michele G. Briggs, SNET Mobility LLC
- Thomas F. Flynn III, Nextel Communications, Inc.
- Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae



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April 18, 2002

Honorable Mary B. Tomolonius
First Selectman
Town of Canton
4 Market Street
P. O. Box 168
Collinsville, CT 06022-0168

RE: **EM-AT&T-023-020415** – AT&T Wireless notice of intent to modify an existing telecommunications facility located at 14 Canton Spring Road, Canton, Connecticut.

Dear Ms. Tomolonius:

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 May 7, 2002, at 1:30 p.m. in Hearing Room One, 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/esc

Enclosure: Notice of Intent

c: Eric Barz, Town Planner, Town of Canton
Frederick E. Turkington, Jr., Chief Administrative Officer, Town of Canton

**NOTICE OF INTENT TO MODIFY AN
EXISTING TELECOMMUNICATIONS FACILITY AT
14 CANTON SPRING ROAD, CANTON, CONNECTICUT**

RECEIVED
APR 15 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 14 Canton Spring Road, Canton, Connecticut (the "Canton Spring Road Facility"), owned by Verizon Wireless ("Verizon"). AT&T Wireless and Verizon have agreed to share the use of the Canton Spring Road Facility, as detailed below.

The Canton Spring Road Facility

The Canton Spring Road Facility consists of an approximately one hundred forty (140) foot monopole (the "Tower") and associated equipment currently being used and/or leased for use for wireless communications by Sprint, Cingular, Nextel, Verizon, VoiceStream and the municipality. A chain link fence surrounds the Tower compound. The Tower is located at the Canton Spring Fire Station.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by URS Corporation, including a site plan and tower elevation of the Canton Spring 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 80 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 structural report 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

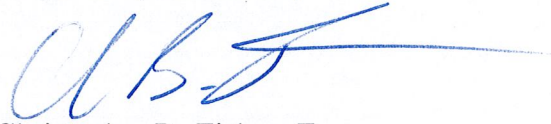
The proposed addition of AT&T Wireless' antennas and equipment to the Canton Spring Road Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' 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 Nader Soliman, 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

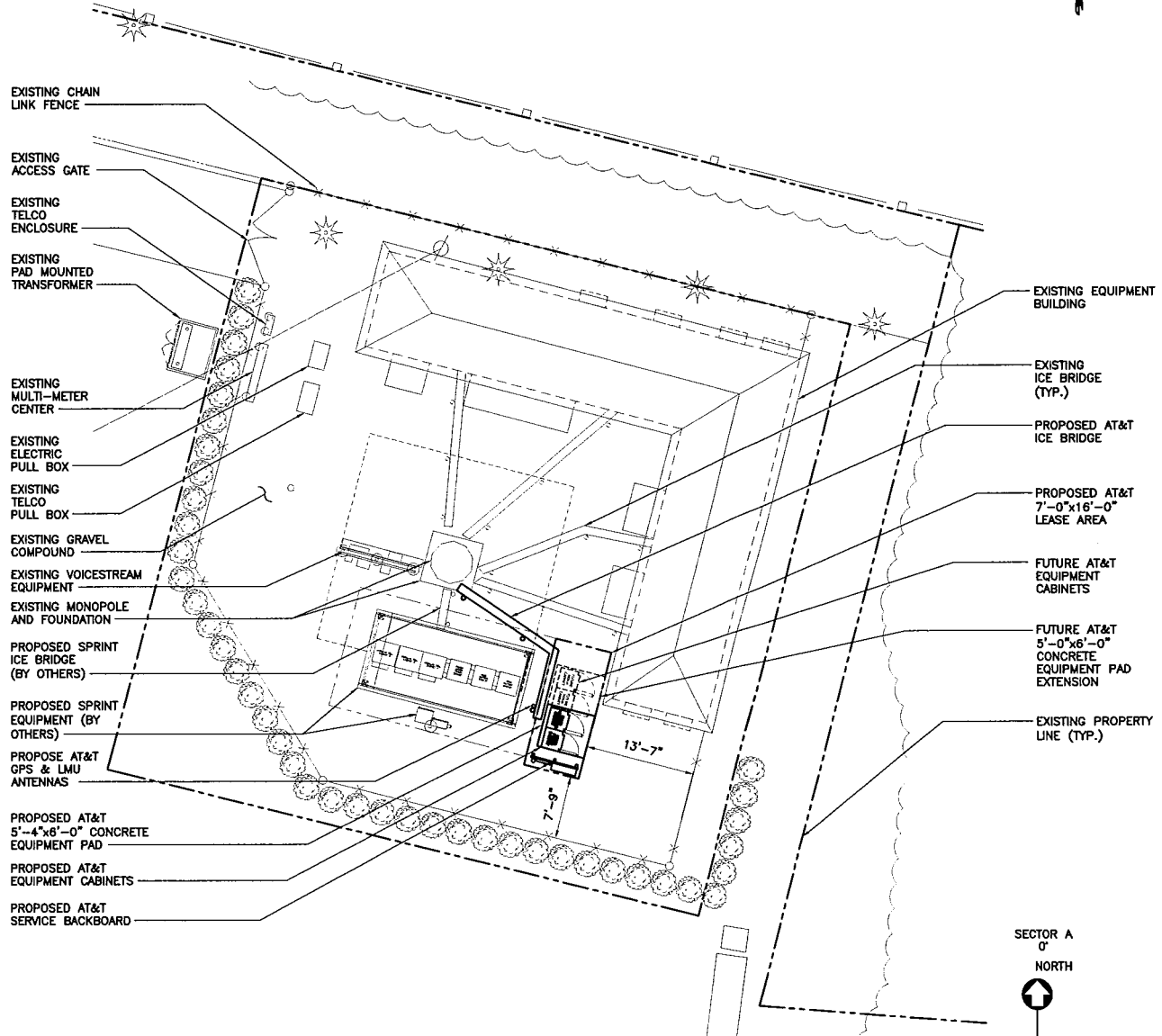
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Canton Spring Road Facility meets the Council's exemption criteria.

Respectfully Submitted,

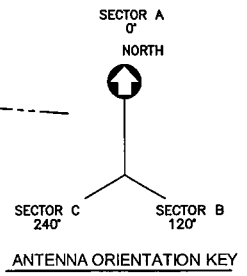
A handwritten signature in blue ink, appearing to read 'C.B. Fisher', with a long horizontal flourish extending to the right.

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

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



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

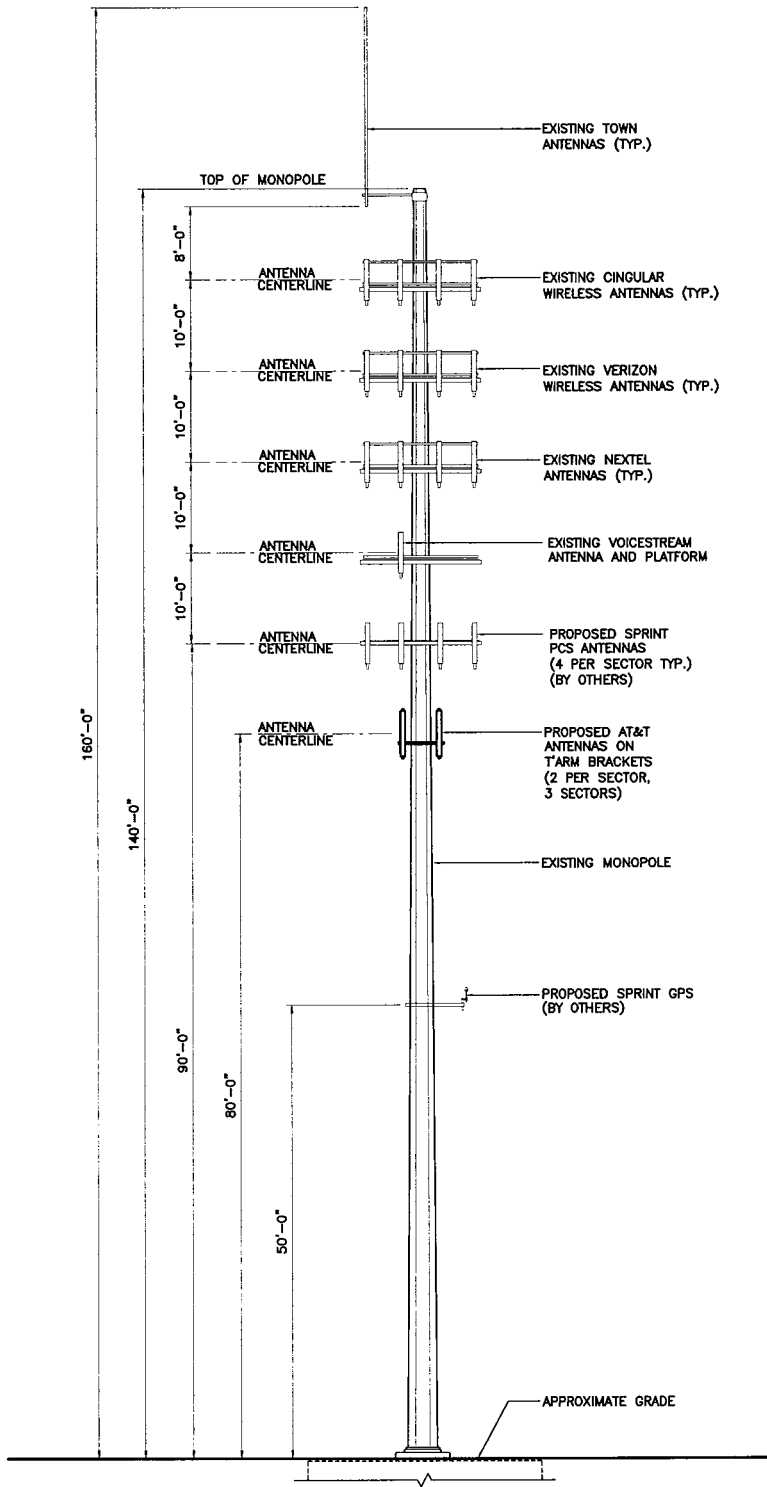


URS
URS CORPORATION-AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CT. 06067
1-(860)-529-8882
URS JOB NO.: F302224.17

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

DRAWING TITLE: COMPOUND PLAN
PROJECT INFORMATION:
CANTON FIRE DEPARTMENT
24445-3CQ-370-SC1-0
14 CANTON SPRING ROAD
CANTON, CONNECTICUT
PROPERTY OWNER:
VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

LATITUDE: 41.4922 (NAD 83)			
LONGITUDE: 72.5345 (NAD 83)			
SCALE: AS NOTED	DRAWN BY: KJB		
DATE ISSUED: 03/12/02	CHECKED BY: JCF		
APPROVED BY:			
ISSUED FOR SITING COUNCIL			
JOB NO. 24445	SITE NO. 3CQ-370	DRAWING NUMBER SC-1	REV. 0



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



LATITUDE: 41.4922 (NAD 83)
LONGITUDE: 72.5345 (NAD 83)

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

ISSUED FOR SITING COUNCIL			
JOB NO.	SITE NO.	DRAWING NUMBER	REV.
24445	3C0-370	SC-2	0

URS
URS CORPORATION-AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CT. 06067
1-(860)-529-8882
URS JOB NO.: F302224.17

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

DRAWING TITLE: TOWER ELEVATION
PROJECT INFORMATION: CANTON FIRE DEPARTMENT
24445-3C0-370-SC2-0
14 CANTON SPRING ROAD
CANTON, CONNECTICUT
PROPERTY OWNER: VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

DETAILED STRUCTURAL ANALYSIS AND EVALUATION OF 140' EXISTING MONOPOLE FOR NEW ANTENNA ARRANGEMENT

Canton Fire Department
14 Canton Springs Road
Canton, Connecticut
AT&T Site No.: CT- 370

prepared for



AT&T WIRELESS PCS
12 OMEGA DRIVE, 2ND FLOOR
STAMFORD, CT 06902
TEL. 203-602-7029



prepared by



URS CORPORATION
795 BROOK STREET, BUILDING 5
ROCKY HILL, CT 06067
TEL. 860-529-8882

F300002224.17

March 15, 2002

Introduction:

A structural analysis of this 140' communications monopole was performed by URS Corporation AES (URS) for AT&T Wireless. The monopole is located at the Canton Fire Department on 17 Canton Springs Road in Canton, Connecticut.

The structure is self-supporting and was manufactured by Engineered Endeavors Inc. job no. 4960 dated May 13, 1999 including its foundation dated May 21, 1999.

This analysis was conducted to evaluate twist (rotation), sway (deflection), and stress on the monopole. The analysis was also used to find the effect of the forces to the foundation resulting from the antenna arrangement listed below.

The antenna inventory obtained:

		<u>Antenna Centerline Elevation</u>
(1) Omnidirectional antenna with a 4' side arm mount and (1) 7/8" coax cable within the monopole	Town	@ 150' elevation
(12) DB846H80 antenna with standard platform and (12) 1 5/8" coax cable within the monopole	Cingular	@ 130' elevation
(12) ALP9212 antenna with standard platform and (12) 1 5/8" coax cable within the monopole	Verizon	@ 120' elevation
(12) Allgon 7130.16 antenna with standard platform and (12) 1-5/8" coax cable within the monopole	Nextel	@ 110' elevation
(3) RR90-17-02DP antenna with low profile platform and (6) 1-5/8" coax cable within the monopole	Voicestream	@ 100' elevation
(12) DB980F65 antenna with low profile platform and (12) 1-5/8" coax cable within the monopole	Sprint (Future)	@ 90' elevation
(6) Allgon 7250.03 antenna with (3) T-Arm mount with (12) 1-5/8" coax cable within the monopole	AT&T (Proposed)	@ 80' elevation
(1) GPS with (1) 7/8" coax cable	Sprint (Future)	@ 50' elevation

Note: 1. This analysis is based on the assumption that all carrier antenna cables are to be placed within the monopole unless otherwise noted. Porthole may be required. Installation of porthole shall be done per manufacturer suggestion.

2. Physical verification may be required to ensure that adequate space is available inside the monopole.

Structural Analysis:

Methodology:

The structural analysis was done in accordance with TIA/EIA-222-F June 1996, Structural Standard for Steel Antenna Towers and Antenna Supporting Structures, the American Institute of Steel Construction (AISC) and the Manual of Steel Construction; Allowable Stress Design (ASD).

The analysis was conducted using ERI Tower 2.0. Two load conditions were evaluated as shown below which were compared to allowable stresses according to AISC and TIA/EIA. The two load combinations were investigated in ERI Tower 2.0 to determine the stress, sway and rotation.

Load Condition 1 =	90 mph Wind Load (without ice) + Tower Dead Load
Load Condition 2 =	90 mph Wind Load (with ice) + Ice Load + Tower Dead Load

The TIA/EIA standard permits one-third increase in allowable stresses for towers and monopoles less than 700 feet tall. For purposes of this analysis, allowable stresses of the monopole members were increased by one-third in computing the load capacity.

Evaluation of Monopole:

Combined axial and bending stresses on the monopole structure were evaluated to compare with allowable stresses in accordance with AISC. In all cases, calculated stresses under the proposed loading were less than allowable stresses.

Analysis Results:

Our analysis determined that the monopole and foundation will support the proposed new antenna arrangements under the analysis criteria outlined on the previous page.

Our analysis for the proposed new antenna arrangement and load condition is provided in Appendix A.

Limitations/Assumptions:

This report is based on the following:

1. Tower inventory as listed in this report.
2. Tower is properly installed and maintained.
3. All members were as specified in the original design Documents and are in good condition.
4. All required members are in place.
5. All bolts are in place and are properly tightened.
6. Tower is in plumb condition.
7. All members are galvanized.
8. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
9. Foundations were properly constructed to support original design loads as specified in the original design Documents.
10. All co-axial cable is installed within the monopole, except as noted.

URS is not responsible for any modifications completed prior to or hereafter, which URS is not or was not directly involved. Modifications include but are not limited to:

1. Adding or relocating antennas and platform

URS hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon information contained and set forth herein. If you are aware of any information which conflicts with that which is contained herein, or you are aware of any defects arising from original design, material, fabrication, or erection deficiencies, you should disregard this report and immediately contact URS. URS disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

1. EXECUTIVE SUMMARY

This report summarizes the structural analysis of the existing 140' monopole located on 14 Canton Springs Road in Canton, Connecticut. The analysis was conducted in accordance with the TIA/EIA-222-F standard for wind velocity of 90 mph and 90 mph concurrent with ½" ice without reduction. The antenna loading considered in the analysis consists of all existing and proposed antennas, transmission lines, and ancillary items as outlined on the following page of this report.

The results of the analysis indicate the structure to be in compliance with the loading conditions and the material and member sizes for the monopole and foundation. The monopole is considered feasible with the TIA/EIA-222-F wind load classification specified above and all the existing and proposed antenna loading.



This analysis is based on:

- 1) Tower report prepared by Engineered Endeavors, Inc. job no. 4960 dated May 13, 1999.
- 2) Foundation report prepared by Engineered Endeavors, Inc. job no. 4960 dated May 21, 1999.
- 3) Antenna inventory as specified on the following page of this report.
- 4) Soils report prepared by Dr. Clarence Welti, P.E., P.C. dated November 23, 1998.
- 5) TIA/EIA-222-F wind load classification.

This report is only valid as per the assumptions and data utilized in this report for antenna inventory, mounts and associated cables.

If you should have any questions, please call.

Sincerely,
URS Corporation AES



The seal is circular with a double border. The outer border contains the text "STATE OF CONNECTICUT" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the name "MOHSEN SAHIRAD" at the top, "NO. 21283" in the center, and "LICENSED" at the bottom. In the center of the seal is a small emblem featuring a shield with a scale of justice and a quill pen.

Mohsen Sahirad, P.E.
Senior Structural Engineer

MS/rmn

cc: Don Huntley, P.E. – Bechtel
Ignacio C. Artaiz, AIA – URS
CF/Book



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

SITE ID: 907-007-370

April 3, 2002

**Prepared by AT&T Wireless Services, Inc.
Nader Soliman 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 14 Canton Springs Road, Canton, CT 06019. 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: <i>Canton Village</i>	
Number of simultaneously operating channels	16
Type of antenna	Allgon 7250.03
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	80 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:

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

Where, *N*= Number of channels, *R*= distance in cm from the RC (Radiation Center) of antenna, and *EIRP(θ)* = The isotropic power expressed in milliwatts in the direction of prediction point. This is the correct equation for antennas which have their gain expressed in dBi, which is the usual case for the PCS bands.

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

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 beam-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 (cm²). 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 0.004240 mW/cm² which occurs at 900 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.000210 mW/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 mW/cm ²	2.9 mW/cm ²	0.004240 mW/cm ²
PCS	1 mW/cm ²	5 mW/cm ²	

The maximum power density at the proposed facility represents only 0.61% of the public MPE limit for PCS frequencies.

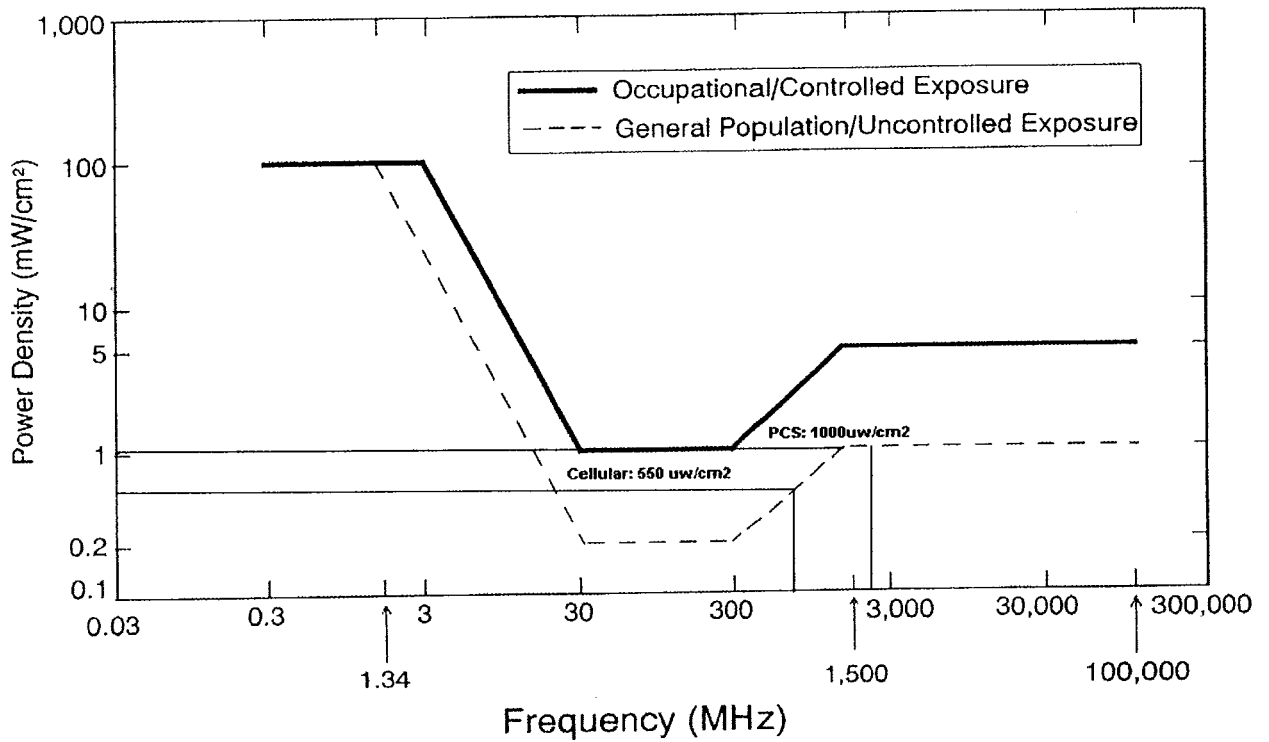
6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 0.004240 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.”

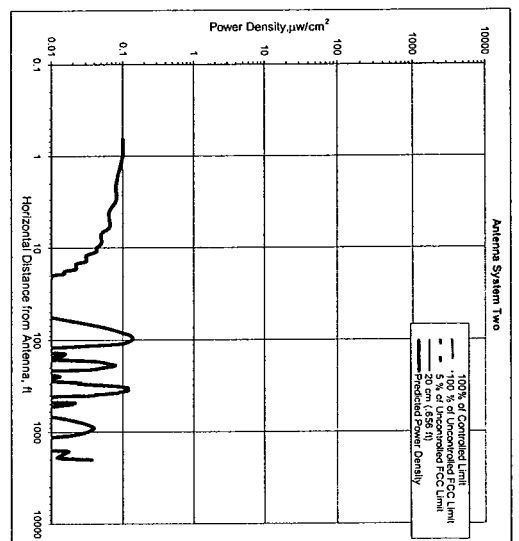
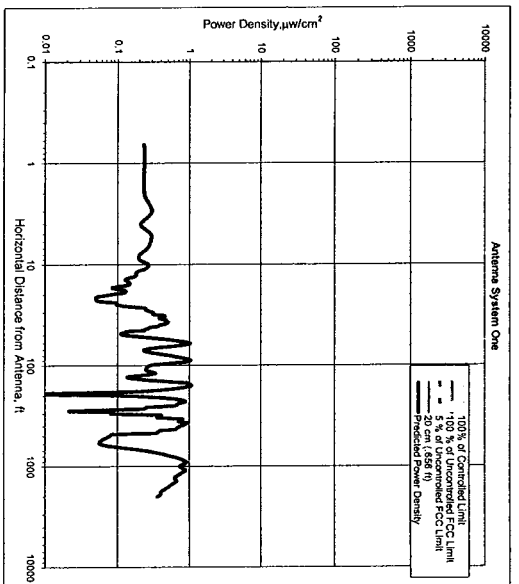
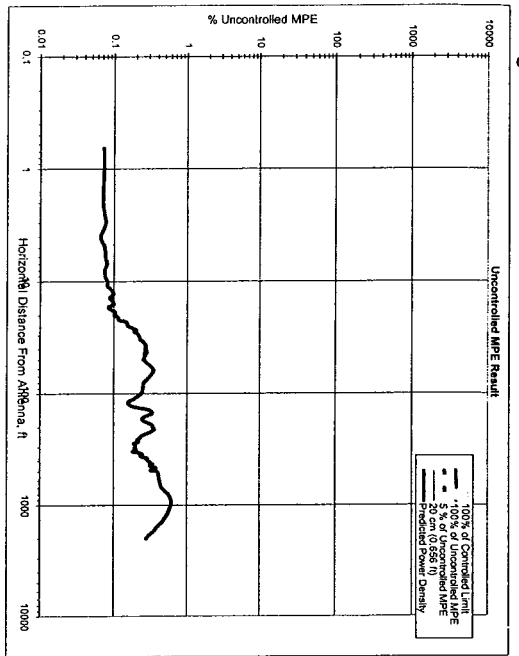
7. FCC Limits for Maximum Permissible Exposure

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



8. Exhibit A

Heading



Meets FCC Controlled Limits for The Antenna Systems: 7

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/cm ²	% of limit	@Horiz. Dist. feet
Maximum Power Density =	0.004240	0.61	900.00
Composite Power (ERP) =	25.600.00	Watts	

Site ID: 330
 Site Name: Canton Village
 Site Location: 14 Canton Springs Road
 Canton, CT 06019
 Performed By: Nader Soliman
 Date: 4/3/02

Antenna System One

Frequency	units	Value
1945.00	MHz	
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	5.86
(Center of Radiator)	feet	80.00
Calculation Point (above ground or roof surface)	feet	0.00
Antenna Model No.		Align 7250.03
Max Ant Gain	dBd	15.30
Down tilt	degrees	0.00
Miscellaneous Ant.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Antenna	feet	77.45
WQS?	Y/N?	n

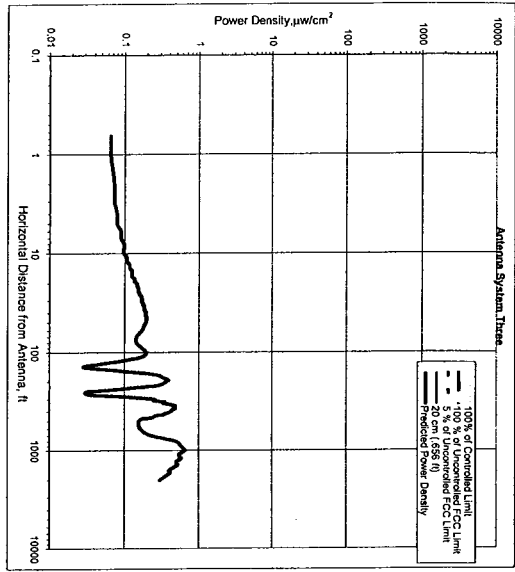
Ant System ONE Owner: AT&T
 Sector: 3
 Azimuth: 0/120/240

Antenna System Two

Frequency	units	Value
824.00	MHz	
# of Channels	#	4
Max ERP/Ch	Watts	400.00
Max Pwr/Ch Into Ant.	Watts	40.00
(Center of Radiator)	feet	150.00
Calculation Point (above ground or roof surface)	feet	0.00
Antenna Model No.		DB810K-KC
Max Ant Gain	dBd	10.00
Down tilt	degrees	0.00
Miscellaneous Ant.	dB	0.00
Height of aperture	feet	14.50
Ant HBW	degrees	360.00
Distance to Antenna	feet	142.75
WQS?	Y/N?	n

Ant System TWO Owner: Town
 Sector: 1
 Azimuth: 360

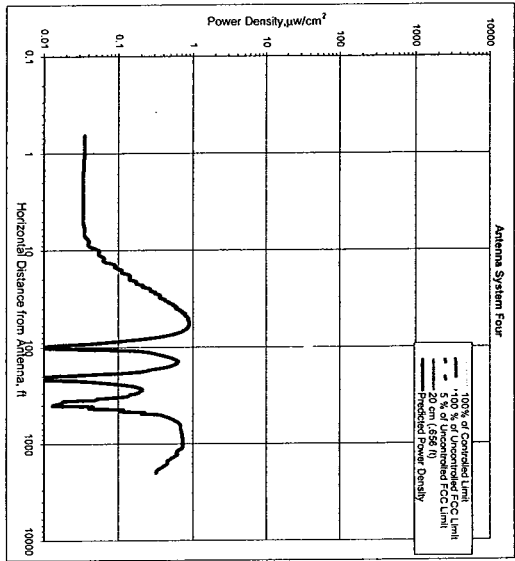
Heading



Antenna System Three

Parameter	units	Value
Frequency	MHz	880.00
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch into Ant. (Center of Radiator)	feet	9.95
Calculation Point (above ground or roof surface)	feet	130.00
Antenna Model No.		0.00
Max Ant Gain	dBd	DB846H80
Down tilt	degrees	14.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	0.00
Ant HBW	degrees	5.00
Distance to Antenna	feet	80.00
WQS?	Y/N?	127.00

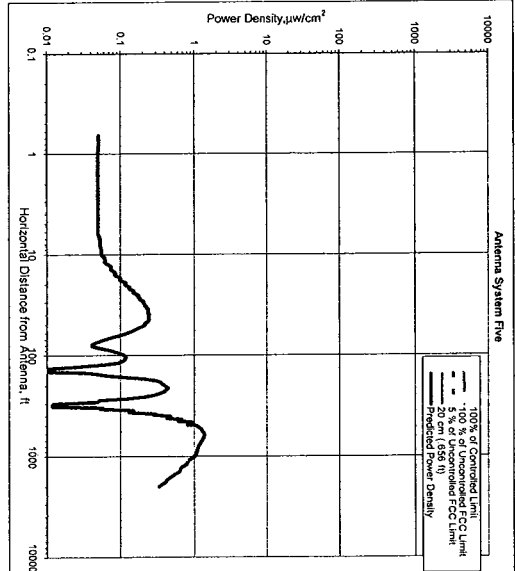
Ant System Three Owner: Cingular
 Sector: 3
 Azimuth: 0/120/240



Antenna System Four

Parameter	units	Value
Frequency	MHz	880.00
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch into Ant. (Center of Radiator)	feet	18.53
Calculation Point (above ground or roof surface)	feet	120.00
Antenna Model No.		0.00
Max Ant Gain	dBd	ALP9212
Down tilt	degrees	11.30
Miscellaneous Att.	dB	0.00
Height of aperture	feet	0.00
Ant HBW	degrees	4.00
Distance to Antenna	feet	95.00
WQS?	Y/N?	118.00

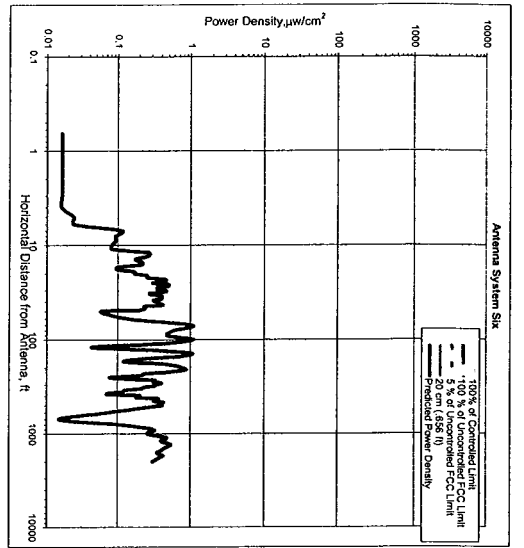
Ant System Four Owner: Verizon
 Sector: 3
 Azimuth: 0/120/240



Antenna System Five

Parameter	units	Value
Frequency	MHz	851.00
# of Channels	#	15
Max ERP/Ch	Watts	250.00
Max Pwr/Ch into Ant. (Center of Radiator)	feet	16.14
Calculation Point (above ground or roof surface)	feet	110.00
Antenna Model No.		0.00
Max Ant Gain	dBd	Aligon 7130.15
Down tilt	degrees	11.90
Miscellaneous Att.	dB	0.00
Height of aperture	feet	0.00
Ant HBW	degrees	4.33
Distance to Antenna	feet	40.00
WQS?	Y/N?	107.84

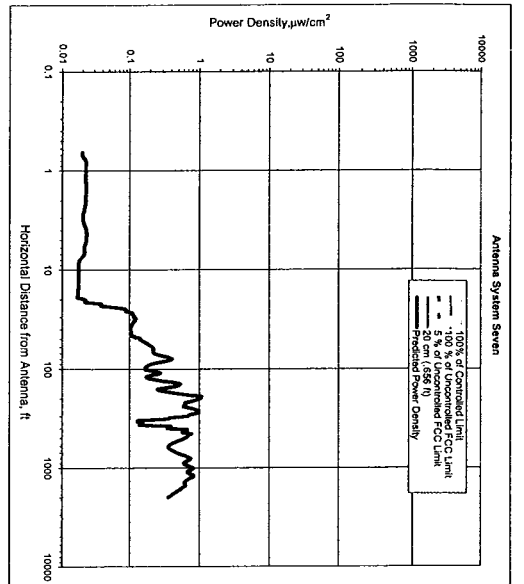
Ant System Five Owner: Nextel
 Sector: 3
 Azimuth: 0/120/240



Antenna System Six

units	Value
Frequency/ MHz	1855.20
# of Channels/ #	16
Max ERP/Ch/ Watts	250.00
Max Pwr/Ch into Ant./ Watts	9.08
(Center of Radiator)/ feet	100.00
Calculation Point (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 Antenna/ feet	97.87
WOS?/ Y/N?	n

Ant System SIX Owner: Veolstream
 Sector: 3
 Azimuth: 0/120/240



Antenna System Seven

units	Value
Frequency/ MHz	1930.00
# of Channels/ #	16
Max ERP/Ch/ Watts	250.00
Max Pwr/Ch into Ant./ Watts	6.73
(Center of Radiator)/ feet	90.00
Calculation Point (above ground or roof surface)/ feet	0.00
Antenna Model No./	DB980665
Max Ant Gain/ dBd	15.70
Down tilt/ degrees	0.00
Miscellaneous Att./ dB	0.00
Height of aperture/ feet	5.00
Ant. HBW/ degrees	65.00
Distance to Antenna/ feet	87.50
WOS?/ Y/N?	n

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

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.

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