

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

October 24, 2002

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

RE: **EM-AT&T-126-021001** - AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 219 Nell's Rock Road, Shelton, Connecticut.

Dear Attorney Fisher:

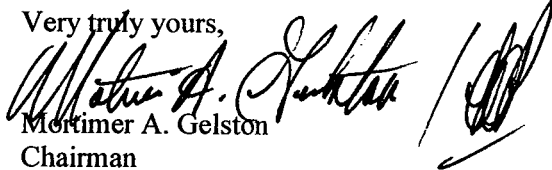
At a public meeting held on October 23, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received in our office on October 1, 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.

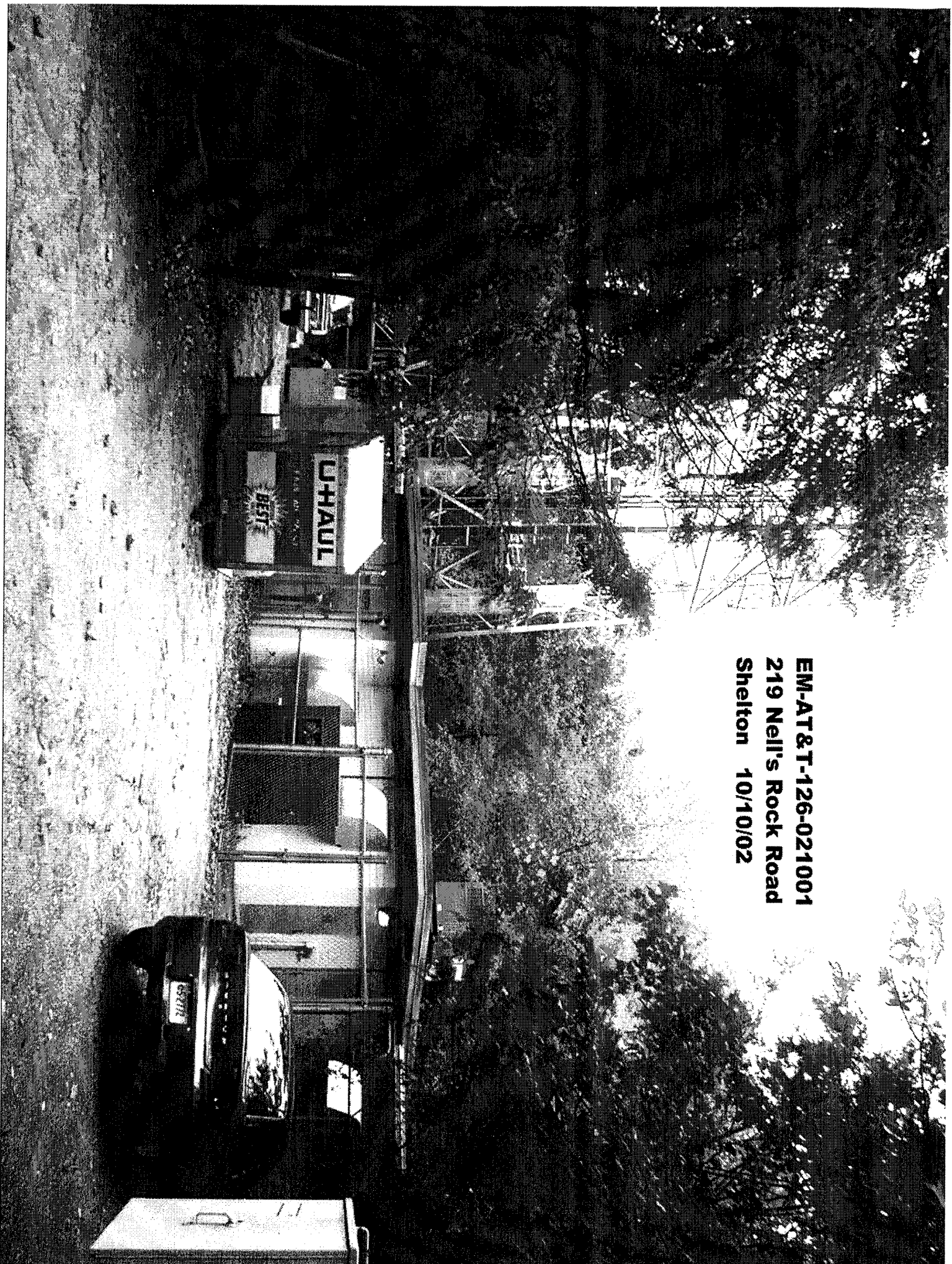
Very truly yours,

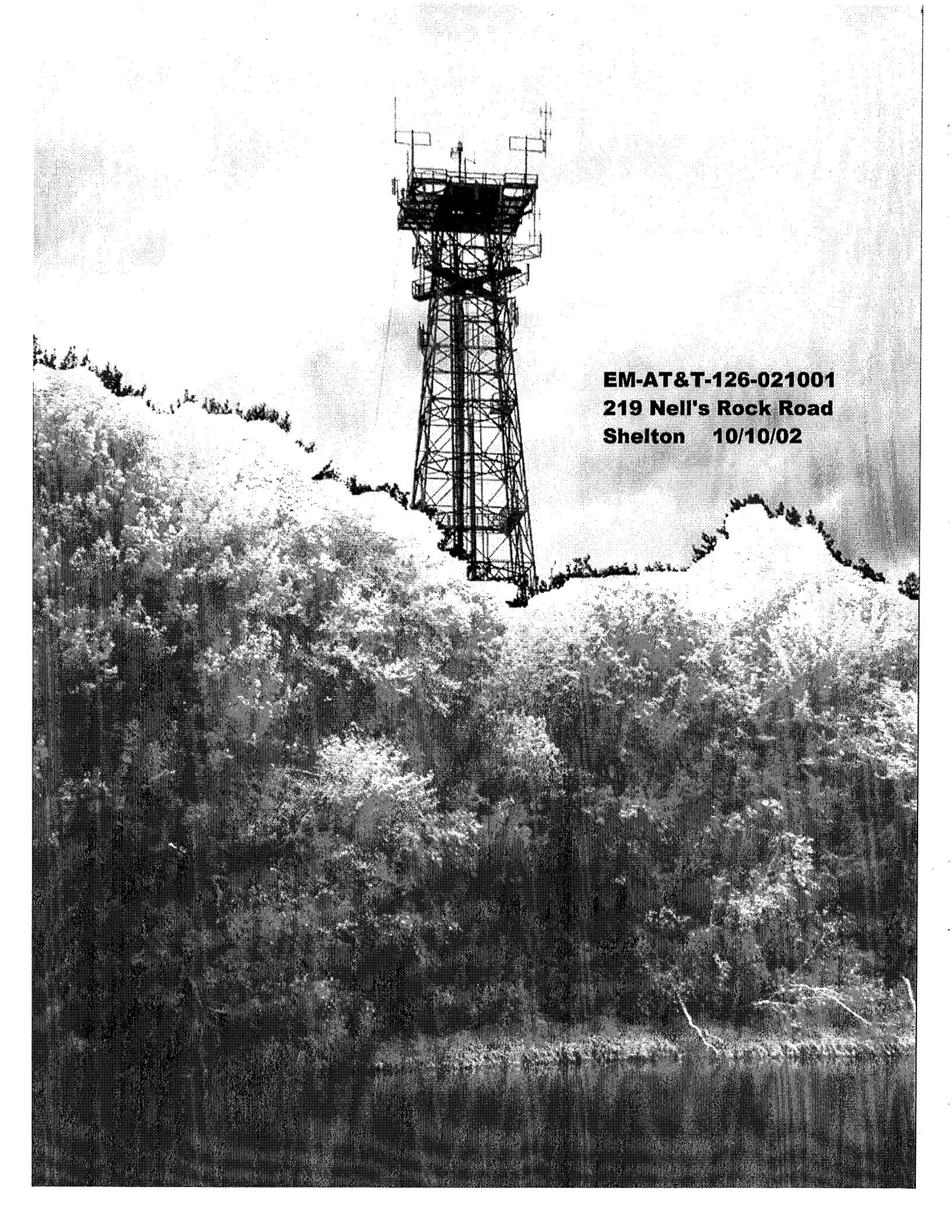

Mortimer A. Gelston
Chairman

MAG/laf

c: Honorable Mark A. Laretti, Mayor, City of Shelton
Richard Schultz, Planning Administrator, City of Shelton
Dawn Holmes, SNET
Julie Donaldson Kohler, Esq., Hurwitz & Sagarin LLC
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae
Sam J. D'Agostino, PageNet, Inc.

EM-AT&T-126-021001
219 Nell's Rock Road
Shelton 10/10/02





EM-AT&T-126-021001
219 Nell's Rock Road
Shelton 10/10/02



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October 3, 2002

Honorable Mark A. Lauretti
Mayor
City of Shelton
54 Hill Street
P. O. Box 364
Shelton, CT 06484

RE: **EM-AT&T-126-021001** - AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 219 Nell's Rock Road, Shelton, Connecticut.

Dear Mayor Lauretti:

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 tentatively scheduled for October 23, 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/slm

Enclosure: Notice of Intent

c: Richard Schultz, Planning Administrator, City of Shelton

**NOTICE OF INTENT TO MODIFY AN
EXISTING TELECOMMUNICATIONS FACILITY AT
219 NELL'S ROCK ROAD, SHELTON, CONNECTICUT, DOCKET NO. 45**

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, by and through its agent AT&T Wireless PCS, Inc., ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 219 Nell's Rock Road, Shelton, Connecticut (the "Nell's Rock Road Facility"), owned by Southern New England Telephone Company ("SNET"). AT&T Wireless and SNET have agreed to share the use of the Nell's Rock Road Facility, as detailed below.

RECEIVED

OCT - 1 2002

The Nell's Rock Road Facility

The Nell's Rock Road Facility consists of an approximately one hundred sixty two (162) foot lattice tower (the "Tower") and associated equipment currently being used for wireless communications by SNET, Sprint, VoiceStream, Arrow Bus and Pagenet. A chain link fence surrounds the Tower compound.

**CONNECTICUT
SITING COUNCIL**

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Clough, Harbour & Associates, LLP, including a site plan and tower elevation of the Nell's Rock 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 130 foot level of the Tower and associated unmanned equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) on a concrete pad within the existing fenced compound. As evidenced in the letter of structural integrity prepared by Bayar Engineering, 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 and associated equipment.

AT&T Wireless' Facility Constitutes An Exempt Modification

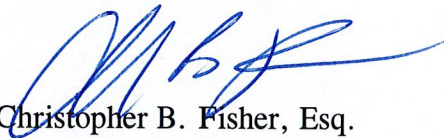
The proposed addition of AT&T Wireless' antennas and equipment to the Nell's Rock Road Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas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

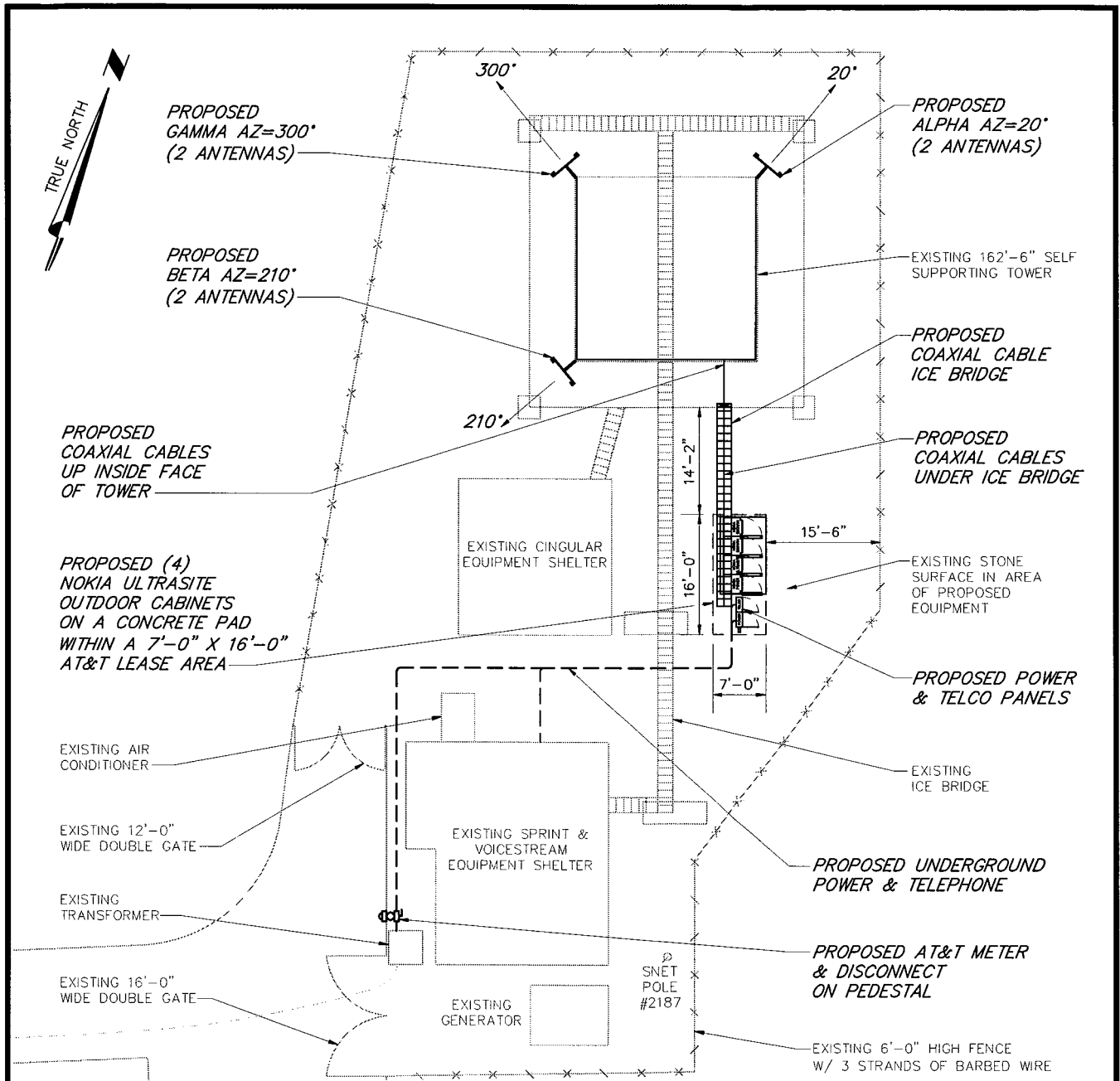
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Nell's Rock Road Facility meets the Council's exemption criteria.

Respectfully Submitted,



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

cc: Mayor, City of Shelton
RJ Wetzel, Bechtel



DRAWING REFERENCE:

- DRAWINGS ARE BASED ON INFORMATION FROM FIELD MEASUREMENTS & PHOTOGRAPHS BY CLOUGH, HARBOUR & ASSOCIATES LLP ON AUGUST 01, 2002.

ENLARGED SITE PLAN

SCALE: 1" = 20'

THIS DRAWING IS FOR OPTION, LICENSE AND PERMITTING PURPOSES ONLY, AND IS NOT TO BE USED FOR CONSTRUCTION

REV	DATE	DRAWN	CHECKED	DESCRIPTION
0	09/04/02	PAL	JCD	ISSUED FOR SITING COUNCIL
1	09/27/02	PAL	JCD	RE-ISSUED FOR SITING COUNCIL

EXHIBIT A

SHEET 1 OF 2

SCALE: 1" = 20'
DATE: SEPTEMBER 27, 2002

REVISION NUMBER 1



CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

2139 SILAS DEANES HIGHWAY -- ROCKY HILL, CT -- 06067
SUITE 212 860-257-4557

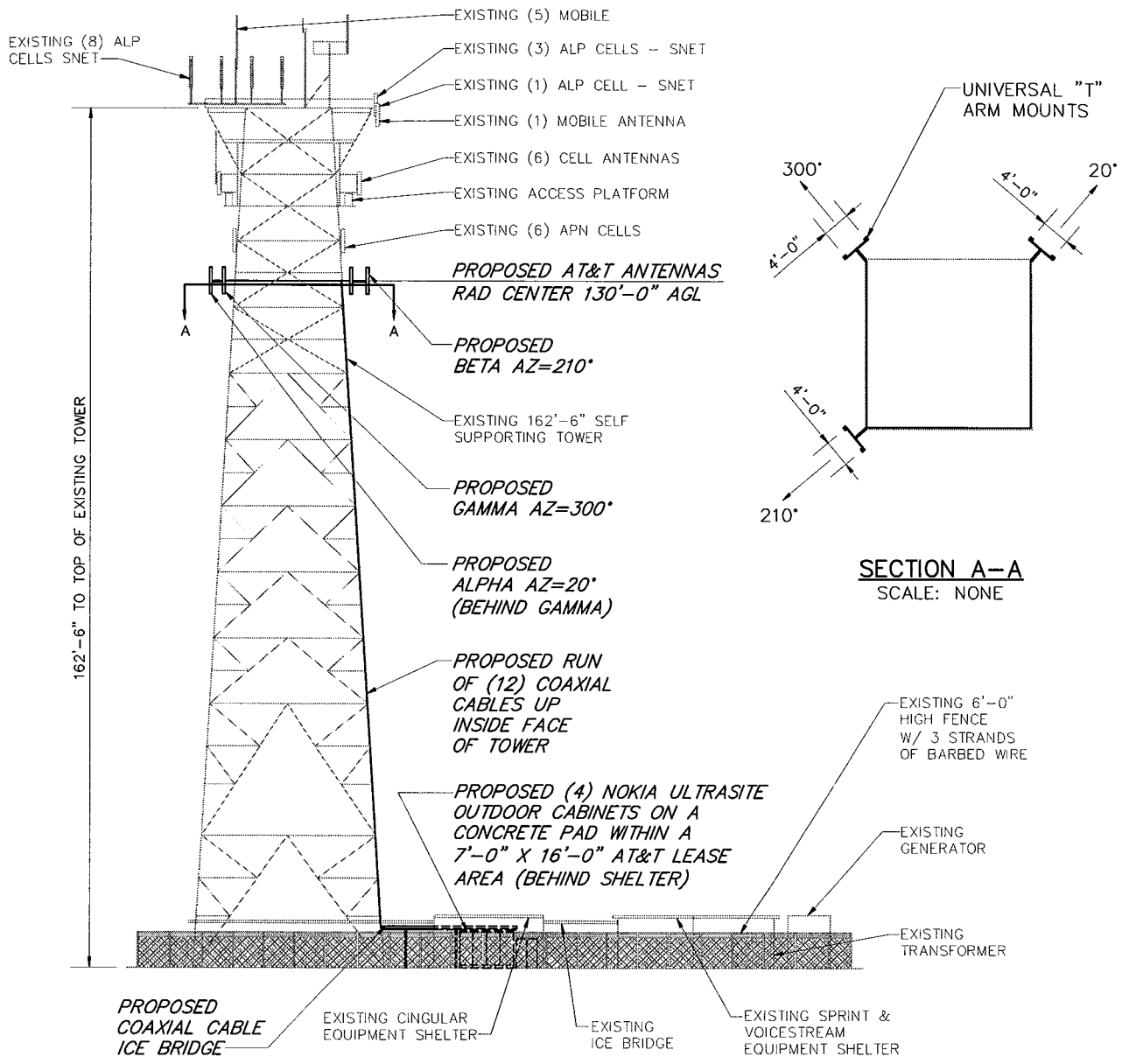


AT&T

AT&T WIRELESS SERVICES, INC.
210 POMEROY AVENUE, SUITE 201
MERIDEN, CT 06450

**SITE # CT-544.1
SHELTON
219 NELL'S ROCK ROAD
SHELTON, CT 06484**

CHA Project Number: 11676-1003



DRAWING REFERENCE:

1. DRAWINGS ARE BASED ON INFORMATION FROM FIELD MEASUREMENTS & PHOTOGRAPHS BY CLOUGH, HARBOUR & ASSOCIATES LLP ON AUGUST 01, 2002.

SOUTHWEST TOWER ELEVATION

SCALE: 1" = 30'

THIS DRAWING IS FOR OPTION, LICENSE AND PERMITTING PURPOSES ONLY, AND IS NOT TO BE USED FOR CONSTRUCTION

REV	DATE	DRAWN	CHECKED	DESCRIPTION
0	09/04/02	PAL	JCD	ISSUED FOR SITING COUNCIL
1	09/27/02	PAL	JCD	RE-ISSUED FOR SITING COUNCIL

EXHIBIT A

SHEET
2 OF 2

SCALE: 1" = 30'
DATE: SEPTEMBER 27, 2002

REVISION
NUMBER 1



CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

2139 SILAS DEANE HIGHWAY - ROCKY HILL, CT - 06067
SUITE 212 860-257-4557

CHA Project Number: 11676-1003



AT&T

AT&T WIRELESS SERVICES, INC.
210 POMEROY AVENUE, SUITE 201
MERIDEN, CT 06450

**SITE # CT-544.1
SHELTON
219 NELL'S ROCK ROAD
SHELTON, CT 06484**



BAYAR ENGINEERING, P.C.
Structural Engineers

P.O. Box 1287, Port Chester, N.Y. 10573-8287
TEL: (914) 681-8749 FAX: (914) 421-0416

Demirtas C. Bayar, P.E.

September 20, 2002

Mr. Jack Dungfelder
Clough Harbour & Associates
2139 Silas Deane Hwy., Suite 212
Rocky Hill, CT 06067-2336

Re: Shelton, CT
Your Project No. 11676-1003-1601
BE Job No. 0218

Dear Jack,

Our site visit indicated that a number of new antennas and cable ladders were installed on the existing 162'-6" type A tower at Shelton, CT since the last time we worked on the tower. The existing antennas and your proposed antennas are indicated on the enclosed Sketch No. 0218.

Our analysis was based on installing 6 Allgon model #7250.03 antennas supported on three universal T arm mounts manufactured by EEI on the existing tower at an antenna centerline of 130' AGL. We also assumed that a new cable ladder will be installed from the 130' level to the base of the tower. Two of the existing cable ladders which were not designed by us seem to be too flexible. We cannot be responsible for their structural adequacy but they do not affect the overall integrity of the tower.

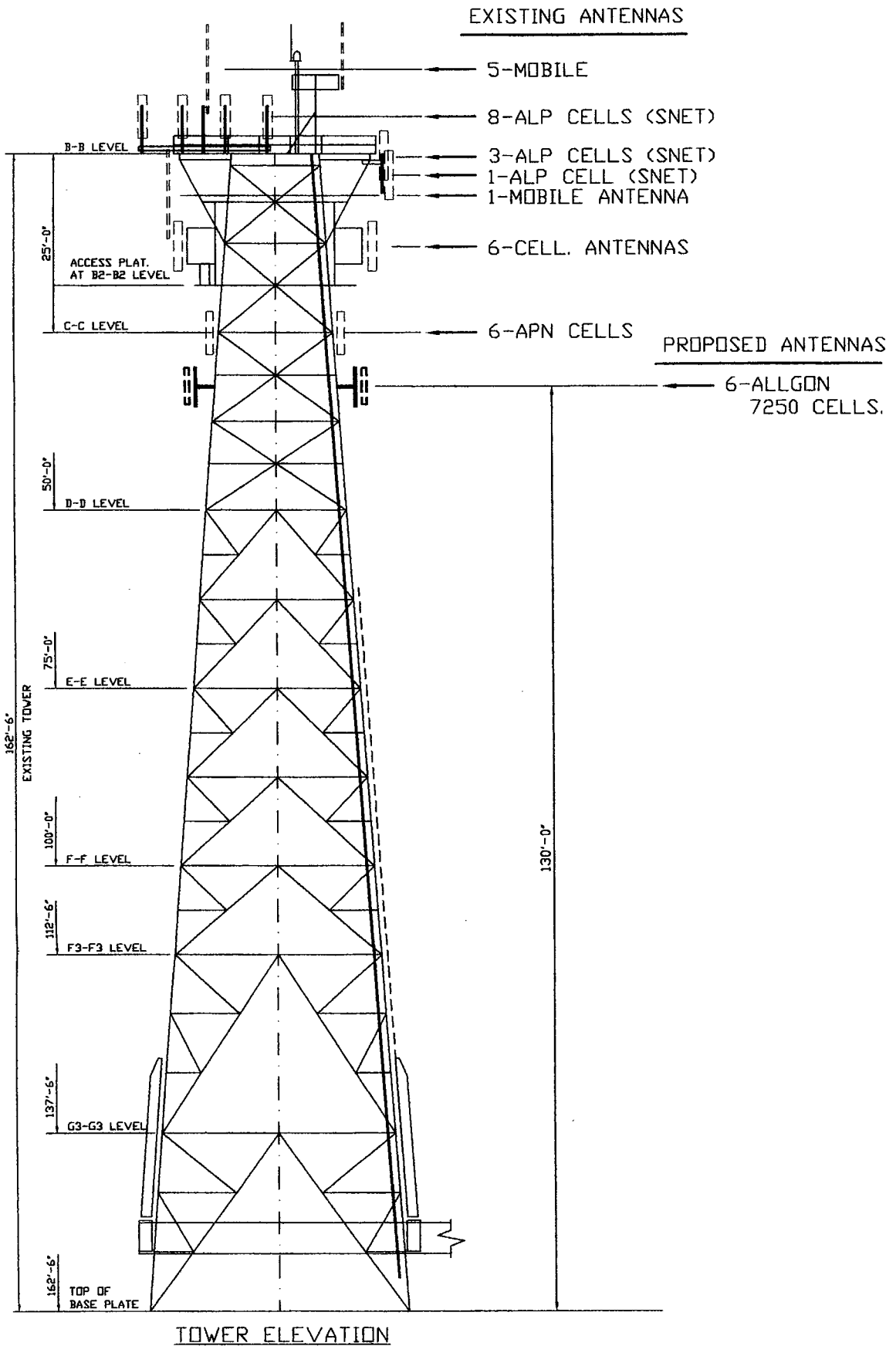
Our analysis indicated that the most critical member of the tower will be stressed to 85% of its capacity; therefore the tower will be adequate to support the loads imposed on it from the existing and proposed antennas.

We would appreciate reviewing the design drawings for the proposed new work. This would help in completing our files and the analysis of any future proposed additions.

Yours truly,

Demirtas Bayar, P.E.
President

P.E. # 12725



TOWER ELEVATION



RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

SITE ID: 913-010-544

AUG 19,2002

**Prepared by AT&T Wireless Services, Inc.
Vishal Kataria 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 219 Nells Rock Road, Shelton, CT-06484. 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: Shelton-SR108	
Number of simultaneously operating channels	12
Type of antenna	Allgon 7250.03
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	130.00 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. This is the correct equation for antennas which have their gain expressed in dBi, which is the usual case for the PCS bands.

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

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 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 (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 for AT&T system is 0.000549 mW/cm² at the antenna facility. 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	0.000549 mW/cm ²
PCS	1 mW/cm ²	5 mW/cm ²	

The maximum power density at the proposed facility represents only 0.05% of the public MPE limit for PCS frequencies. As other transmitters are also located at this site, I have taken the findings of the most recent Siting Council filing on this site, and added that exposure to ours as shown in Exhibit A. I find that the combined exposures are 10.046% of the Maximum Permissible Exposure for uncontrolled populations.

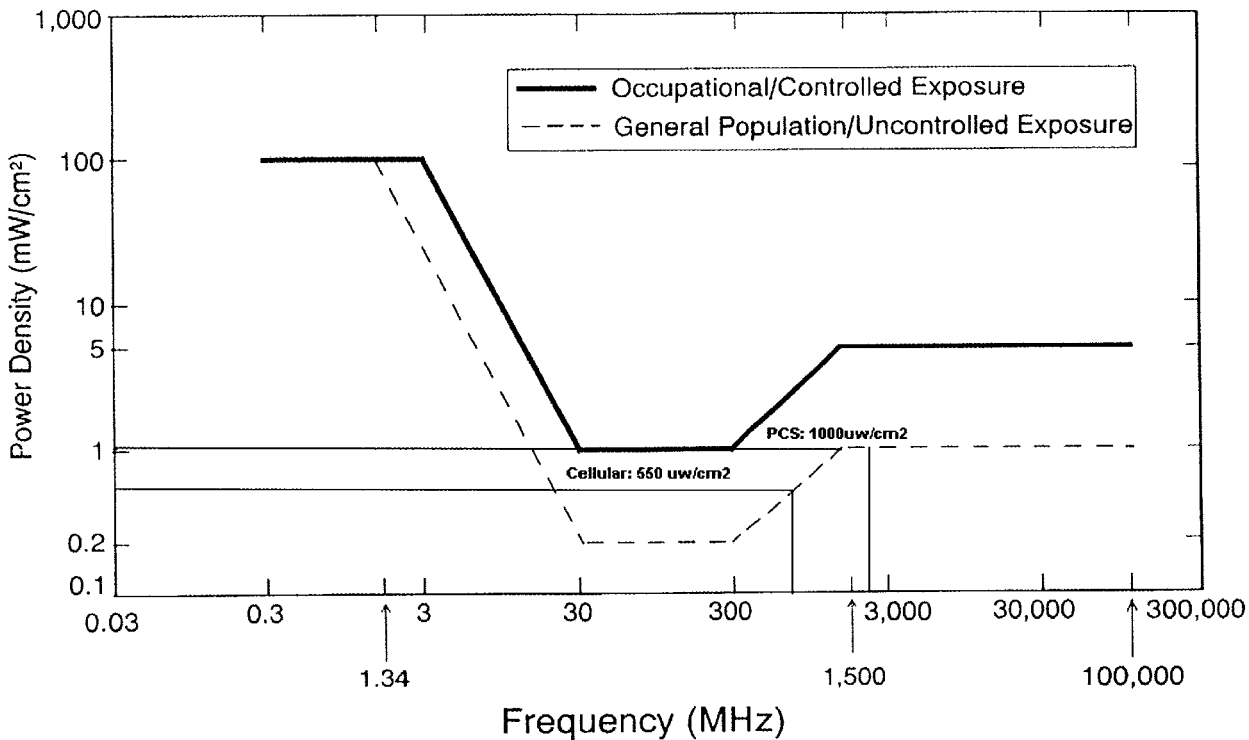
6. Conclusion

This analysis show that the maximum power density Percentage in accessible areas at this location is 10.046% , a level of RF energy that is below the Maximum Permissible Exposure limit established by the FCC.

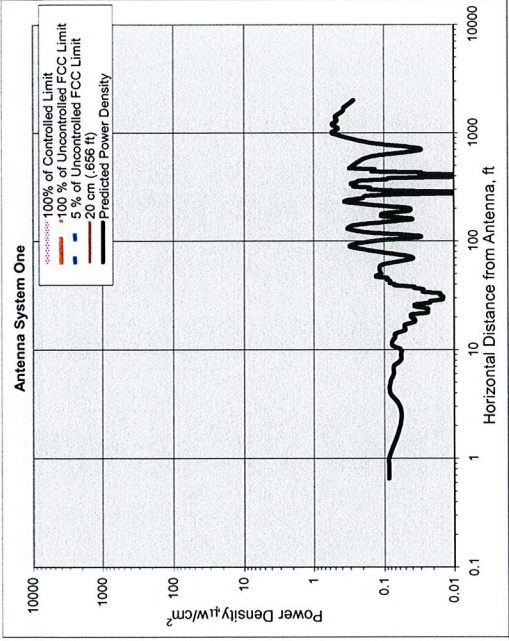
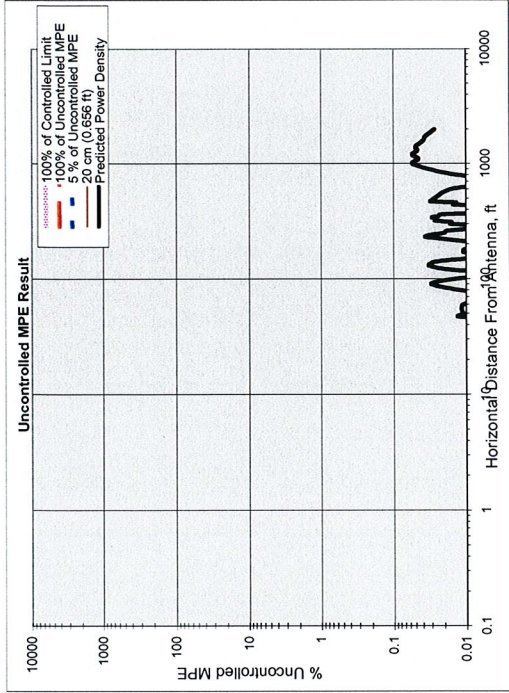
² 47 U.S. C. Section 332 (c) (7)(B)(iv) states that “[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such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



Number of Antenna Systems: 1
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	Power Density	Power Density
mW/cm²	% of limit	@Horiz. Dist.
0.000549	0.05	feet
1.82165 times lower than the MPE limit for uncontrolled environment		1200.00
Composite Power (ERP) = 3.000.00 Watts		

Site ID: 913-010-544
 Site Name: Shelton-SR-108
 Site Location: 219 Nells Rock Road
 Shelton, CT-06484

Performed By: Vishal Kataria
 Date: 8/19/2002

Antenna System One

Parameter	units	Value
Frequency	MHz	1965.00
# of Channels	#	12
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	5.86
Calculation Point (Center of Radiator)	feet	130.00
Calculation Point (above ground or roof surface)	feet	0.00
Antenna Model No.		Allison 7250.03
Max Ant Gain	dBd	16.30
Down tilt	degrees	2.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant. HBW	degrees	65.00
Distance to Ant _{Location}	feet	127.45
WOS?	Y/N?	n

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



Power Density Analysis for CT-544

Working with data from current filing:

SI. No.	Carrier System	% MPE
1	Total % MPE for SNET	2
2	Total % MPE for Pagenet	2.73
3	Total % MPE for Sprint	2.449
4	Total % MPE for Voice stream	0.928
5	Total % MPE For Arrow Bus	1.889
	EXISTING TOTAL % MPE	9.996
4	% MPE FROM AT&T Wireless system	0.05
	TOTAL (PROPOSED) % MPE	10.046

Prepared by:

Vishal Kataria
RF Engineer,
Bechtel Telecommunications
AT&T Wireless Services, Inc.

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.