



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

10 Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

October 4, 2001

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

RE: **TS-AT&T-054-010906** - AT&T Wireless PCS, LLC d/b/a AT&T Wireless request for an order to approve tower sharing at an existing telecommunications facility located at 2577 Main Street, Glastonbury, Connecticut.

Dear Attorney Fisher:

At a public meeting held October 3, 2001, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures. 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated September 4, 2001.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/laf

c: Honorable Kurt P. Cavanaugh, Chairman Town Council, Town of Glastonbury
Richard J. Johnson, Town Manager, Town of Glastonbury
Kenith Leslie, Town Planner, Town of Glastonbury
Ronald C. Clark, Nextel Communications
Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC

CUDDY & FEDER & WORBY LLP

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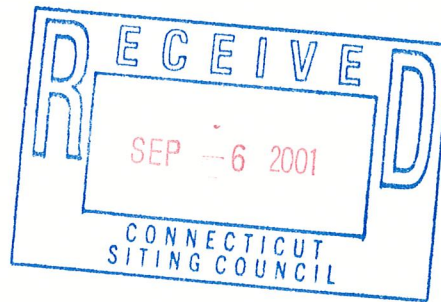
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DANIEL F. LEARY (also CT)
BARRY E. LONG

September 5, 2001

VIA FEDERAL EXPRESS

Mr. Joel Rinebold
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Tower Sharing Request by AT&T Wireless
Existing Tower Facility at St. Paul's Church
2577 Main Street, Glastonbury, Connecticut



Dear Mr. Rinebold:

On behalf of AT&T Wireless PCS, LLC d/b/a AT&T Wireless, we respectfully enclose an original and twenty copies of its request for the shared use of an existing tower with respect to the above mentioned facility, together with a check for \$500.00, the filing fee. We would appreciate it if this matter were placed on the next available agenda by the Council to approve the application and issue an order for shared use by AT&T. Should the Council or staff have any questions regarding this matter, please do not hesitate to contact us.

Very truly yours,

Linda Grant
Linda Grant

Encls.

cc: Christopher B. Fisher, Esq.

CUDDY & FEDER & WORBY LLP

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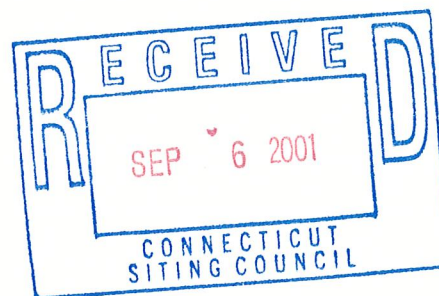
Of Counsel
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BARRY E. LONG

September 4, 2001

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members
of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051



Re: Tower Sharing Request by AT&T Wireless
Existing Tower Facility at St. Paul's Church
2577 Main Street, Glastonbury, Connecticut

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Pursuant to Connecticut General Statutes (C.G.S.) § 16-50aa, AT&T Wireless PCS LLC, by and through its agent AT&T Wireless Services, Inc., ("AT&T Wireless") hereby requests an order from the Connecticut Siting Council (the "Council") to approve the proposed shared use of an existing communications tower, located at 2577 Main Street in the Town of Glastonbury (the "Main Street Facility"), owned by Nextel Communications ("Nextel"). AT&T Wireless and Nextel have agreed to the shared use of the Main Street Facility, as detailed below.

The Main Street Facility

The Main Street Facility consists of an approximately one hundred thirty (130) foot high lattice tower (the "Tower") currently being used or approved for use by Sprint PCS and Nextel. A chain link fence surrounds the Main Street Facility. Current surrounding land uses are predominantly commercial.

September 4, 2001

Page 2

chain link fence surrounds the Main Street Facility. Current surrounding land uses are predominantly commercial.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Tectonic Engineering, including a site plan and tower elevation of the Main Street Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment needed to provide personal communications services ("PCS") within the existing fenced compound. AT&T Wireless will install up to twelve (12) panel antennas at approximately the 108 foot level of the Tower and a 12' x 20' equipment shelter within the existing fenced compound.

Connecticut General Statutes § 16-50aa provides that, upon written request for shared use approval, an order approving such use shall be issued, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns." (C.G.S. § 16-50aa(c)(1).) Further, upon approval of such shared use, it is exclusive and no local zoning or land use approvals are required C.G.S. § 16-50x. Shared use of the Main Street Facility satisfies the approval criteria set forth in C.G.S. § 16-50aa as follows:

- A. Technical Feasibility AT&T has confirmed that the tower with reinforcement is structurally capable of supporting the addition of AT&T Wireless' antennas. The proposed shared use of this tower is therefore technically feasible. See structural report from Tectonic Engineering, annexed hereto as Exhibit A.
- B. Legal Feasibility Pursuant to C.G.S. § 16-50aa, the Council has been authorized to issue an order approving shared use of the existing Main Street Facility. (C.G.S. § 16-50aa(c)(1)). Under the authority vested in the Council by C.G.S. § 16-50aa, an order by the Council approving the shared use of a tower would permit the Applicant to obtain a building permit for the proposed installation.
- C. Environmental Feasibility The proposed shared use would have a minimal environmental effect, for the following reasons:
 1. The proposed installation would have a de minimis visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics of the existing facility;

September 4, 2001

Page 3

2. The proposed installation by AT&T Wireless would not increase the height of the tower or extend the boundaries of the Main Street Facility;
 3. The proposed installation would not increase the noise levels at the existing facility boundaries by six decibels or more;
 4. Operation of AT&T Wireless' antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. The "worst case" exposure calculated for the operation of this facility for all carriers, would be approximately 9.68% of the standard. See Cumulative Emissions Compliance Report dated July 19, 2001, prepared by Alex Murillo, AT&T Radio Frequency Engineer, annexed hereto as Exhibit B;
 5. The proposed shared use of the Main Street Facility would not require any water or sanitary facilities, or generate air emissions or discharges to water bodies. Further, the installation will not generate any traffic other than for periodic maintenance visits.
- D. Economic Feasibility The Applicant and the tower owner have agreed to share use of the Main Street Facility on terms agreeable to both parties. The proposed tower sharing is therefore economically feasible.
- E. Public Safety As stated above and evidenced in the Cumulative Emissions Compliance Report annexed hereto as Exhibit B, the operation of AT&T Wireless' antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. Further, the addition of AT&T Wireless' telecommunications service in the Glastonbury area through shared use of the Main Street Facility is expected to enhance the safety and welfare of local residents and travelers through the area resulting in an improvement to public safety in this area.

Conclusion

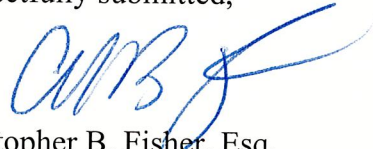
As delineated above, the proposed shared use of the Main Street Facility satisfies the criteria set forth in C.G.S. § 16-50aa, and advances the General Assembly's and the Siting Council's goal of preventing the proliferation of towers in the State of Connecticut. AT&T

September 4, 2001

Page 4

Wireless therefore requests the Siting Council issue an order approving the proposed shared use of the Main Street Facility.

Respectfully submitted,

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

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

cc: Richard J. Johnson, Town Manager
Carmen Chapman, AT&T Wireless
Michael Austin, Bechtel Telecommunications
Rich Zelanzy, Pinnacle Site Development



AT&T WIRELESS PCS, LLC.

UNMANNED WIRELESS COMMUNICATION EQUIPMENT SITE
"SITE NO. CT-273"
GLASTONBURY
GLASTONBURY, CONNECTICUT

PROJECT INDEX	
SITE NUMBER:	CT-273
SITE ADDRESS:	2577 MAIN STREET GLASTONBURY, CT 06033
OWNER:	ST. PAUL'S ROMAN CATHOLIC CHURCH 2553 MAIN STREET GLASTONBURY, CT 06033
APPLICANT:	AT&T WIRELESS PCS, LLC. 12 OMEGA DRIVE, SECOND FLOOR STAMFORD, CT 06902
TAX MAP:	MAP 43 PARCEL W38A
LATITUDE (NAD 27):	41° 42' 52" N
LONGITUDE (NAD 27):	72° 36' 47" W



W.O. #: 2650.CT273 DATE: 2/23/01

TECTONIC ENGINEERING CONSULTANTS P.C.

TITLE SHEET

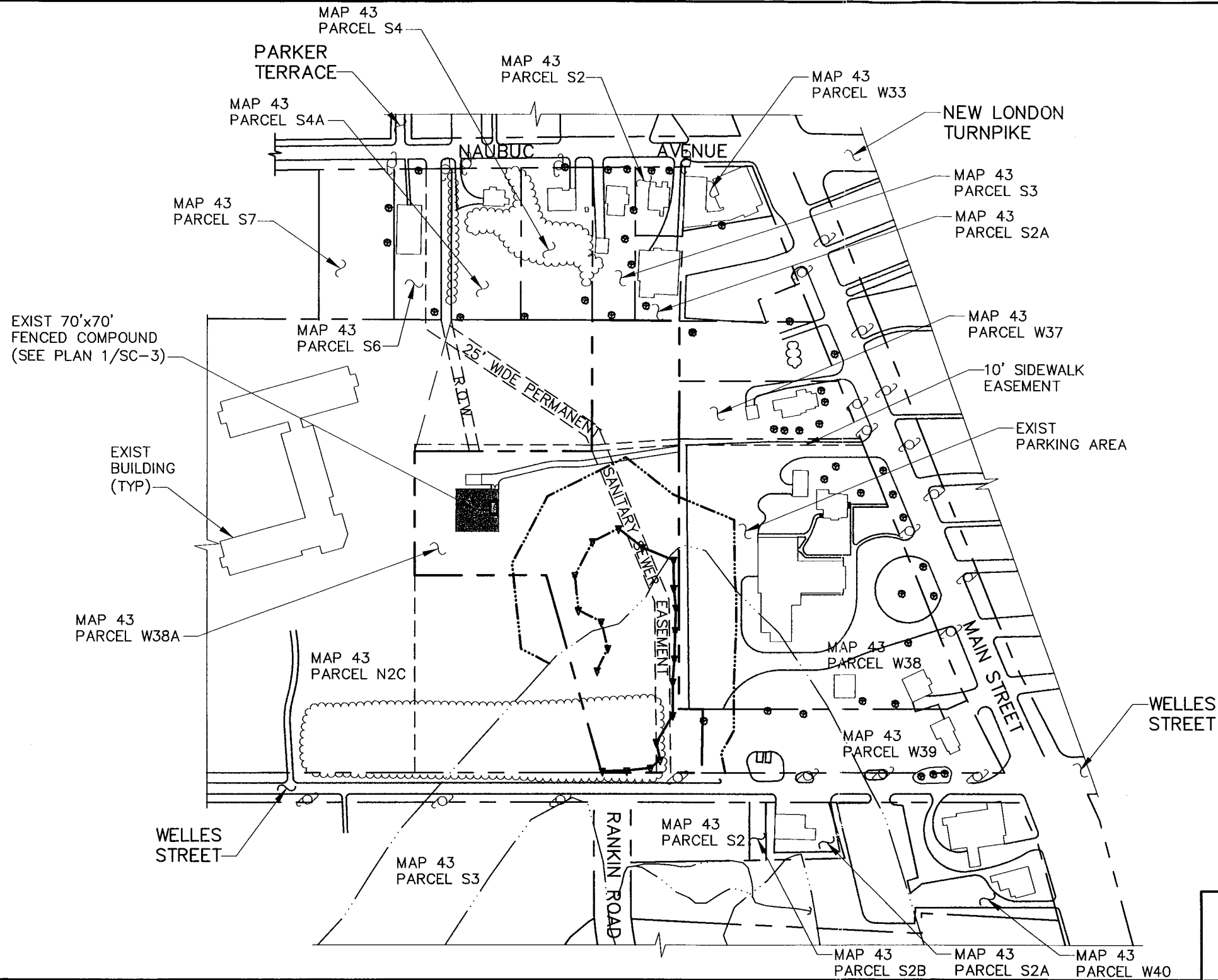
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GLASTONBURY
SITE NO. CT-273
2577 MAIN STREET
GLASTONBURY, CT 06033

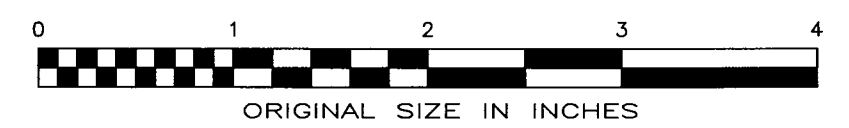
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0	3/27/01	ISSUED FOR APPROVAL	CA		
A	2/23/01	ISSUED FOR COMMENT	CA		

SCALE: AS NOTED DESIGNED BY: KZ DRAWN BY: CA

AT&T
AT&T WIRELESS PCS, LLC.
12 Omega Drive, Second Floor
Stamford, CT 06902



LEGEND	
	PROPERTY LINE
	ADJOINING PROPERTY
	CONSERVATION BUFFER ZONE
	WETLAND BOUNDARY (BY VHB)
	EXIST WETLANDS (BY TOWN)
	EASEMENT LINE
	EXIST FENCE
	EXIST TREE
	EXIST UTILITY POLE
	EXIST TREELINE
	EXIST EDGE OF PAVEMENT



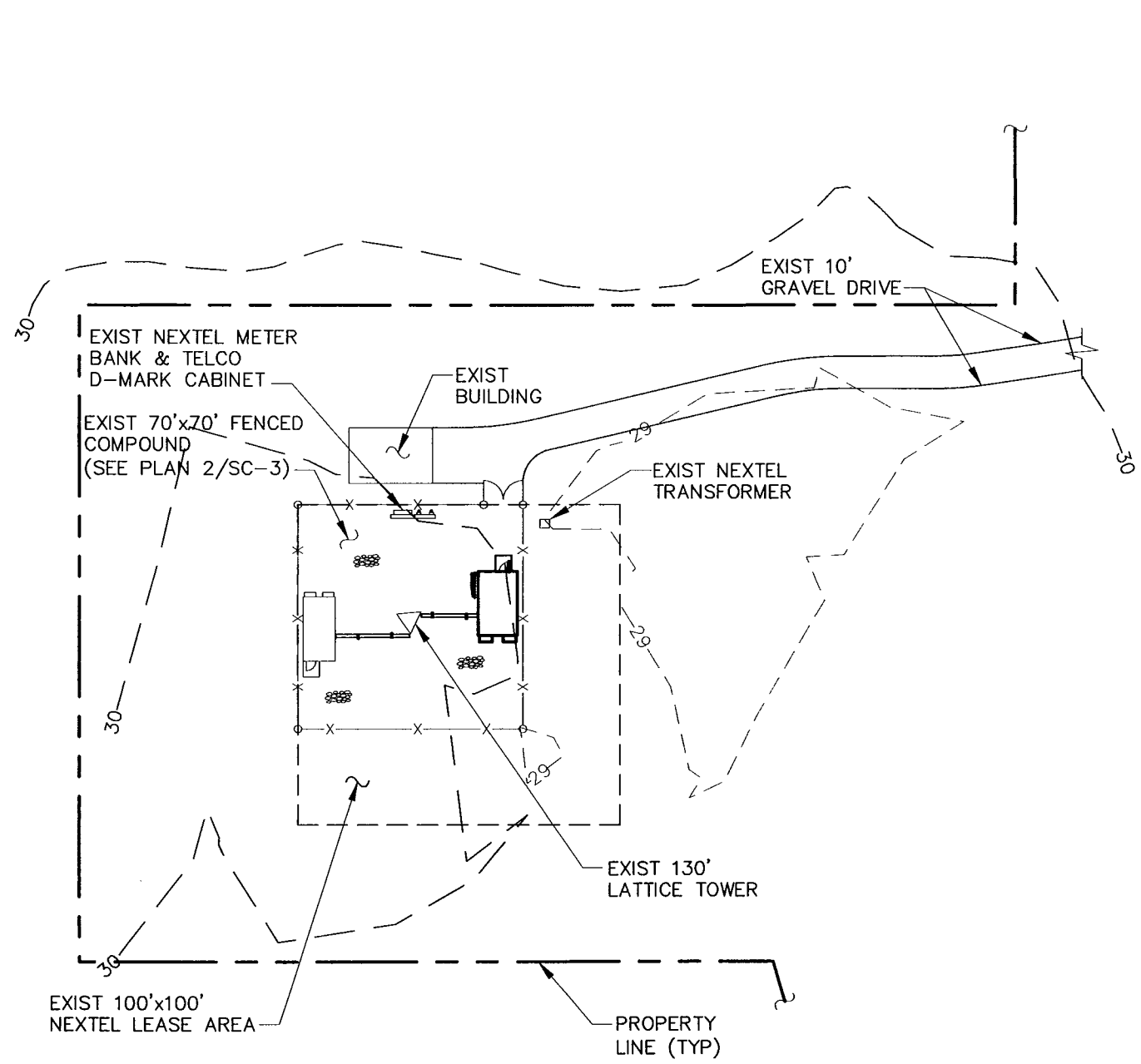
GLASTONBURY
 SITE NO. CT-273
 2577 MAIN STREET
 GLASTONBURY, CT 06033

NO.	DATE	REVISIONS	BY	CHK	APP'D
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A	2/23/01	ISSUED FOR COMMENT		CA	

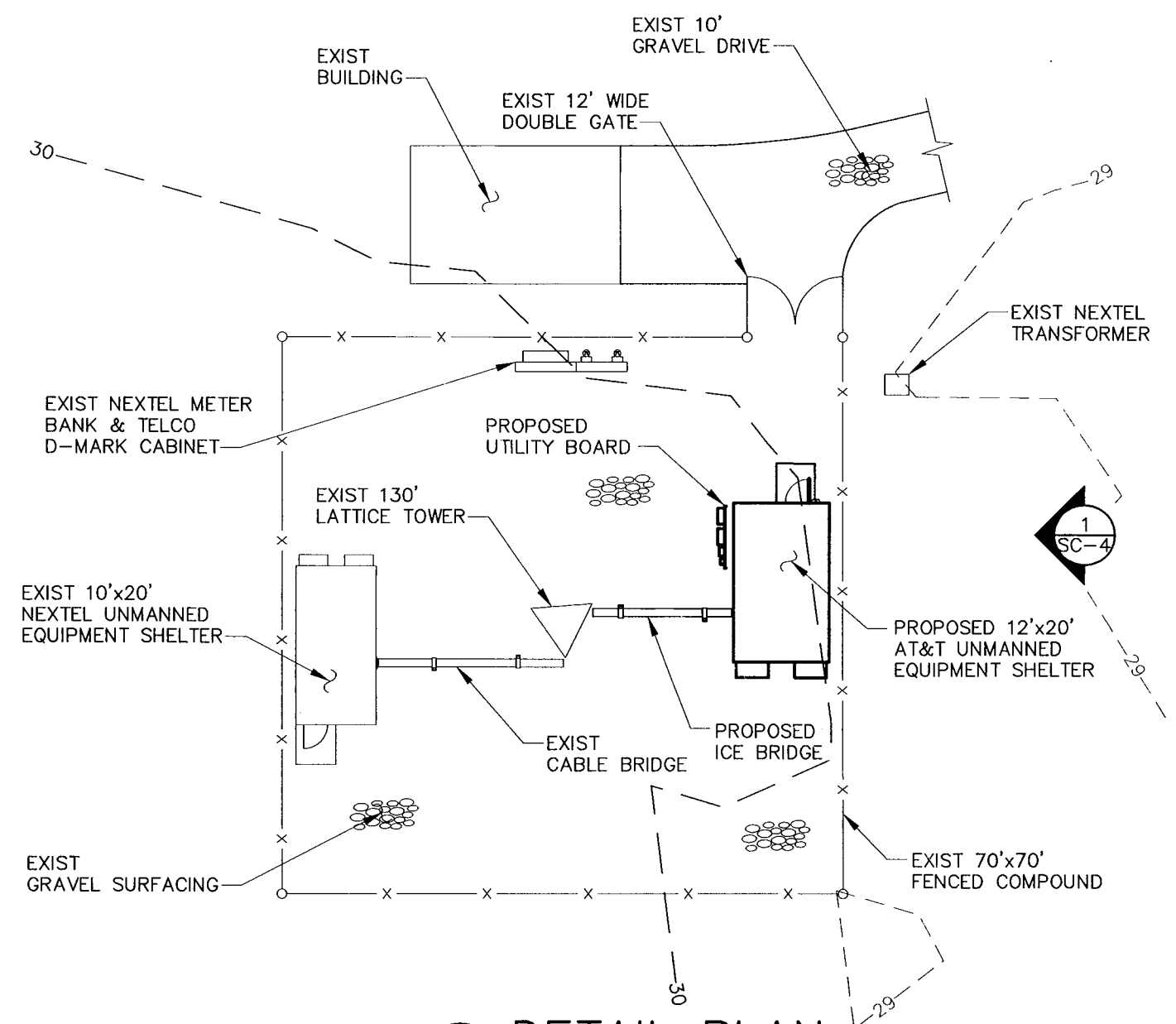
SCALE: 1" = 200' DESIGNED BY: KZ DRAWN BY: CA



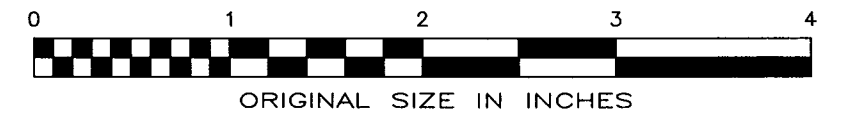
W.O. #: 2650.CT273		DATE: 2/23/01	
TECTONIC ENGINEERING CONSULTANTS P.C.			
PLOT PLAN			
JOB NO.	SITE NO.	DRAWING NUMBER	REV
24445	3CO-CT273	SC-2	0



1
SC-3
PARTIAL SITE PLAN
SCALE: 1" = 50'



2
SC-3
DETAIL PLAN
SCALE: 1" = 20'



GLASTONBURY
SITE NO. CT-273
2577 MAIN STREET
GLASTONBURY, CT 06033

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	8/17/01	ISSUED PER COMMENT		CA	
0	3/27/01	ISSUED FOR APPROVAL		CA	
A	2/23/01	ISSUED FOR COMMENT		CA	

SCALE: AS NOTED DESIGNED BY: KZ DRAWN BY: CA

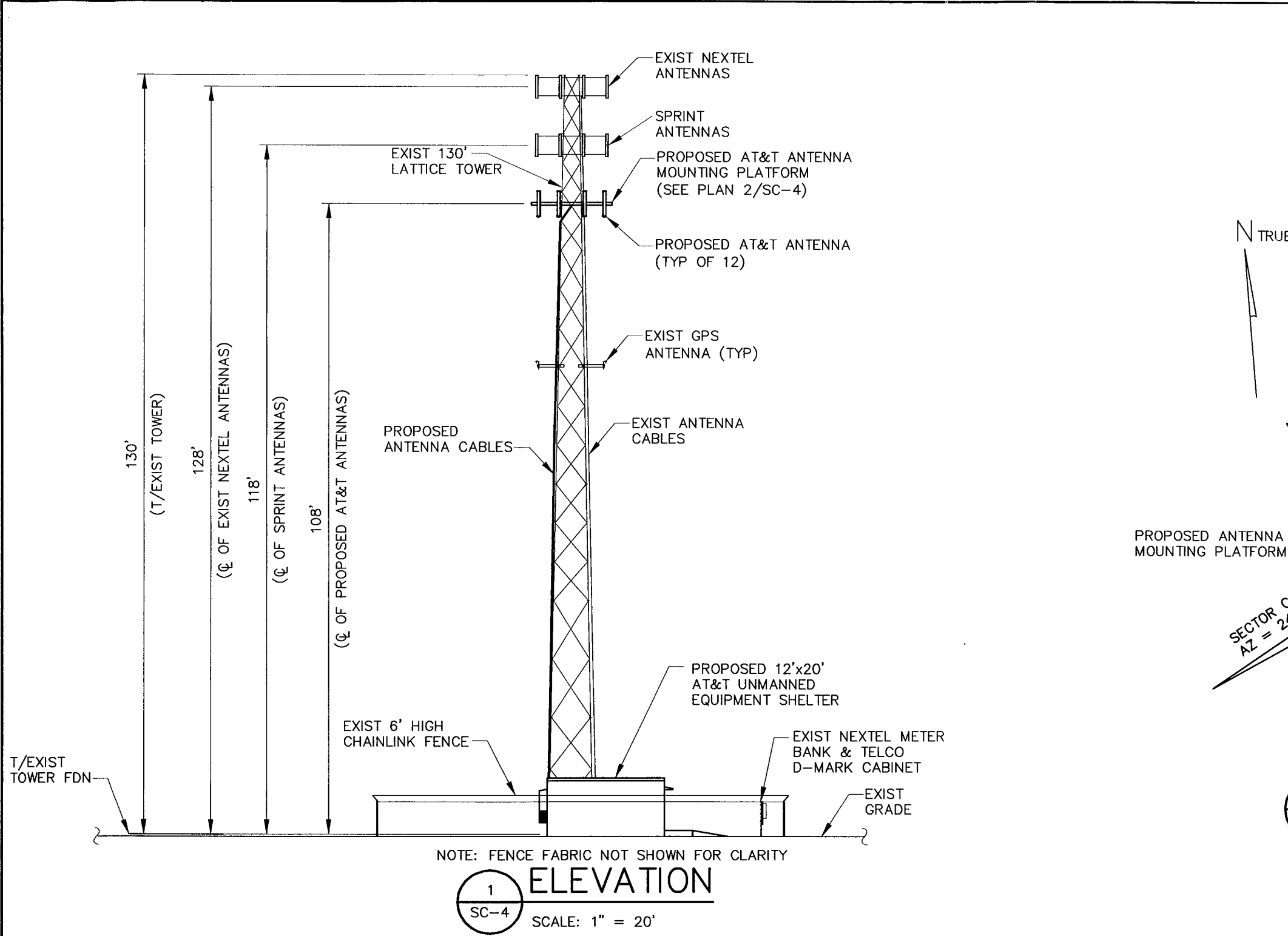


W.O. #: 2650.CT273 DATE: 2/23/01

TECTONIC ENGINEERING CONSULTANTS P.C.

PARTIAL SITE PLAN & DETAIL PLAN

JOB NO.	SITE NO.	DRAWING NUMBER	REV
24445	3CO-CT273	SC-3	0

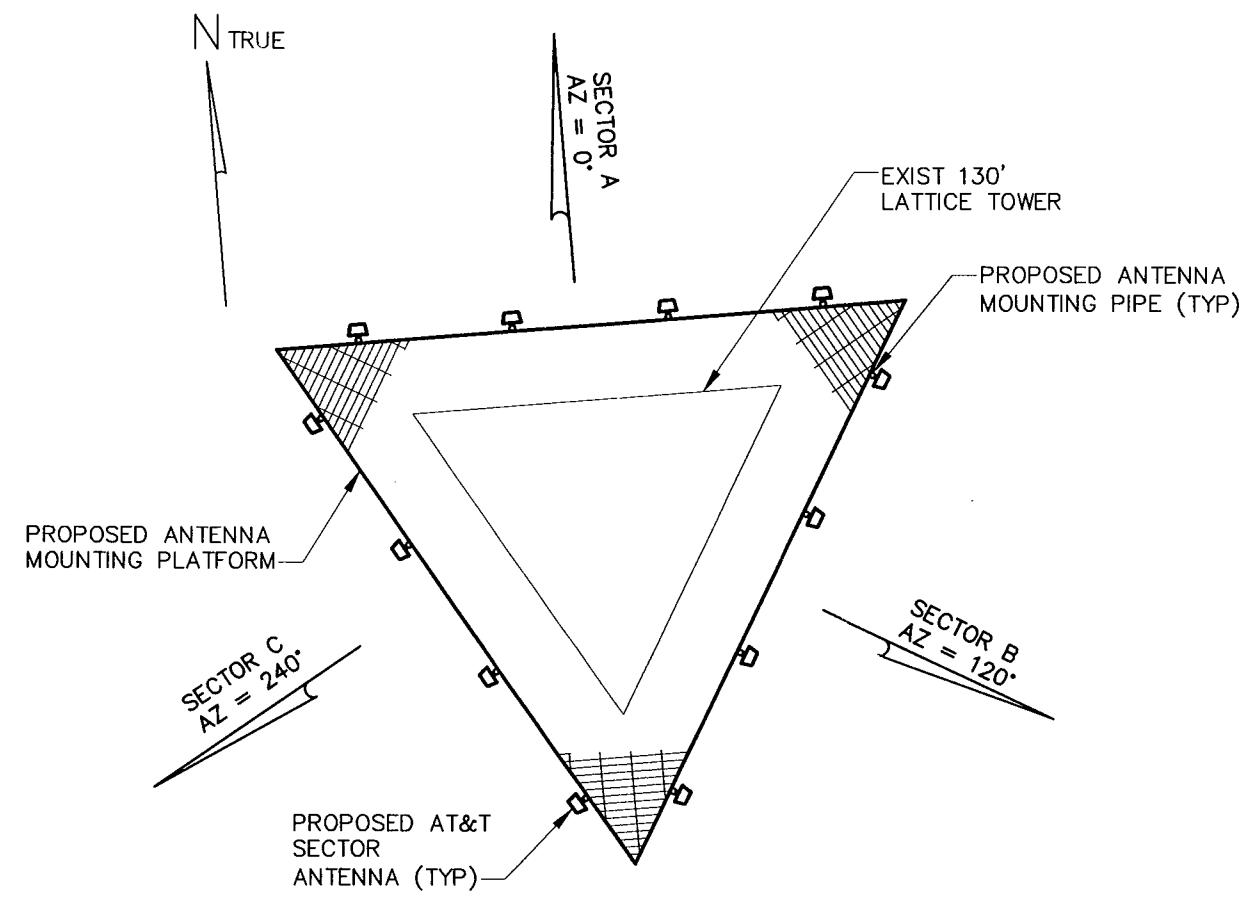


NOTE: FENCE FABRIC NOT SHOWN FOR CLARITY

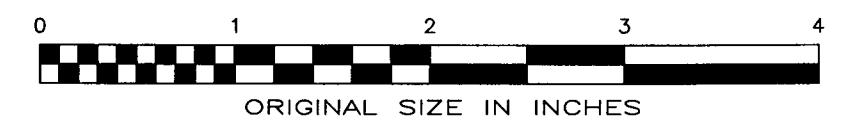
1
SC-4
ELEVATION
SCALE: 1" = 20'

GENERAL NOTES:

1. PROPOSED AT&T SHELTER TO BE PLACED IN EXISTING TELECOMMUNICATIONS COMPOUND.
2. PLACEMENT OF ANTENNAS TO BE VERIFIED BY STRUCTURAL ANALYSIS ON TOWER.
3. ANTENNA AZIMUTHS TO BE CONFIRMED BY RF ENGINEER.
4. ROUTING OF ELEC & TELCO SERVICES TO BE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER.



2
SC-4
ANTENNA MOUNTING PLAN
SCALE: NONE



GLASTONBURY
SITE NO. CT-273
2577 MAIN STREET
GLASTONBURY, CT 06033

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	8/17/01	ISSUED PER COMMENT		CA	
0	3/27/01	ISSUED FOR APPROVAL		CA	
A	2/23/01	ISSUED FOR COMMENT		CA	

SCALE: AS NOTED DESIGNED BY: KZ DRAWN BY: CA



W.O. #: 2650.CT273 DATE: 2/23/01

TECTONIC ENGINEERING CONSULTANTS P.C.

ELEVATION & ANTENNA MTG PLAN

JOB NO.	SITE NO.	DRAWING NUMBER	REV
24445	3CO-CT273	SC-4	0

AT&T WIRELESS PCS: GLASTONBURY CENTER
SITE No. CT-273.1.4
W.O. 2650.CT273
GLASTONBURY, CT
EXISTING 130' SELF-SUPPORTING TOWER
STRUCTURAL ANALYSIS REPORT – REVISION 1
APRIL 27, 2001

1.0 INTRODUCTION

The existing 130-foot self-supporting tower is located at 2577 Main Street in Glastonbury, CT, and currently serves the communication needs of Nextel Communications. AT&T Wireless PCS and Sprint PCS anticipate installing panel antennas on this tower in the near future.

Tectonic Engineering Consultants, PC has performed a structural analysis of the tower to verify its adequacy for supporting the proposed antennas in accordance with current code requirements. This revision incorporates addition of the proposed Sprint PCS installation and an alternate mounting height for the proposed AT&T antennas.

1.1 Information Provided

For the purpose of the analysis, Tectonic was furnished with the following information:

1. 130' S6BPA Tower Design, Nextel Communications CT-0057, Glastonbury, CT, by Fred A. Nudd Corporation, drawing no. 99-6893-1, dated 7/12/99.
2. Foundation Details, Nextel Communications CT-0057, Glastonbury, CT, by Fred A. Nudd Corporation, drawing no. 99-6893-2, dated 9/16/99.
3. Design calculations for Nextel, Glastonbury, CT, by Fred A. Nudd Corporation, project #: 6893, dated 9/16/99 (13 pages).
4. RF sheet for Glastonbury Center – Saint Paul's Roman Catholic Church, RF no. CT-273.1.4, by AT&T Wireless PCS, dated 10/17/00.
5. Email containing information on the proposed Sprint PCS antennas, dated 4/5/01.

2.0 ORIGINAL TOWER DESIGN

2.1 Tower Structure

The Fred A. Nudd Corporation designed the tower in 1999. It is a standard three-legged self-supporting tower. The tower consists of six (6) 20' long sections and a 10' long top section, for a total height of 130'. The lower 100'

portion of the tower is constructed of steel pipe leg members and single angle bracing, whereas the upper 30' portion uses solid rod for the leg and bracing members. Horizontal steel angle members are present in the upper 30' portions of the tower.

The tower is 7'-6" wide at the base, tapering uniformly to a width of 2'-6" at the 100' level. The tower has a uniform width of 2'-6" from the 100' level to the top. All member connections are bolted, except for the upper 30' of the tower, which has welded bracing connections.

A diagram of the structure is presented in Figure 1, attached.

2.2 Loading Criteria

The original design was based on ANSI/TIA/EIA-222-F-1996 using a basic wind speed of 85 mph with no ice and a reduced wind speed in conjunction with 1/2" radial ice. The tower was designed to support the following loads:

- 12 Swedcom ALP 9212 antennas at the 130' level
- 3 12' Cellular Boom at the 130' level
- 12 1-1/4" diameter coaxial cables to the 130' level
- 12 Swedcom ALP 9212 antennas at the 120' level
- 3 12' Cellular Boom at the 120' level
- 12 1-1/4" diameter coaxial cables to the 120' level

2.3 Tower Foundation

The foundation was also designed by Fred A. Nudd Corporation in 1999. It consists of a 26'-0" square by 3'-0" thick reinforced concrete mat, bearing at a depth of 4'-0" below grade. Three (3) 3'-0" diameter or 3'-0" square piers extend from the top of the mat to 6" above grade.

The foundation design reactions are listed on Fred A. Nudd design drawing.

3.0 EXISTING CONDITION

3.1 Field Inspection

A representative of Tectonic performed a brief inspection of the tower from the ground on January 17, 2001. Several photographs were taken to document the existing configuration and conditions.

Based on our limited inspection, the tower legs and braces are in very good

condition. No damage or significant deformation of the tower was observed.

The exposed portions of the concrete foundation are also in good condition. We therefore expect that the tower and its foundation are capable of supporting the original design loads.

3.2 Existing Antennas and Equipment

At the time of our inspection, the tower was found to be supporting the items listed below:

- 12 Decibel DB844H90(E)-XY panel antennas at approximately the 128' level (centerline), mounted four (4) per sector on three (3) mounting frames
- 12 1-1/4" diameter cables on a waveguide ladder to the 128' level
- 2 GPS antennas at the 80' level
- 2 1/2" diameter cables on the same waveguide ladder to the 80' level
- Step bolts with a safety cable on one leg to the top
- Step bolts on the remaining legs to approximately the 15' level

4.0 PROPOSED INSTALLATION

It is our understanding that all the existing antennas and equipment will remain on the structure, and the following items are proposed to be added to the tower by Sprint PCS and AT&T Wireless PCS:

Sprint PCS

- 12 Decibel DB978H90M panel antennas at the 118' level (centerline), mounted four (4) per sector on a 13' wide low-profile platform
- 12 1-1/4" diameter cables on a waveguide ladder to the 118' level on a different tower face than the existing Nextel cables

AT&T Wireless PCS

- 12 Allgon 7184.14 panel antennas at the 108' level (antenna centerline), mounted four (4) per sector on a 13' wide low-profile platform
- 12 1-1/4" diameter cables on a waveguide ladder to the 108' level on the third tower face without the existing Nextel or the proposed Sprint cables

In order to reduce the stresses in the tower members, we have also considered the alternative of installing the proposed AT&T antennas installed at the 95' level in our analysis.

5.0 STRUCTURAL ANALYSIS

5.1 Current Loading Criteria

In accordance with the provisions of ANSI/TIA/EIA-222-F-1996 "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures," a basic wind speed of 80 mph applies to Hartford County, CT, where the tower is located. This wind speed is consistent with that required by the Connecticut supplement to the BOCA National Building Code – 1996 for the Town of Glastonbury.

Ice loads have been established based on a 0.5" radial ice thickness in accordance with industry standard practice. A reduced wind speed of 69 mph is used in conjunction with ice.

We note that the wind speed of 85 mph used in the original design is greater than that required by the current applicable codes.

5.2 Procedure

The tower has been analyzed with STAAD/Pro 2000, a general purpose, three-dimensional structural analysis program. The analysis includes the following:

1. The tower with the existing and the proposed Sprint and AT&T antennas and cables, using:
 - a) an 80 mph wind speed with no ice
 - b) a 69 mph wind speed with 0.5" ice
2. The tower with the existing and the proposed Sprint antennas and cables along with the proposed AT&T antennas at the alternate height of 95', using:
 - a) an 80 mph wind speed with no ice
 - b) a 69 mph wind speed with 0.5" ice

5.3 Assumptions

Several assumptions were made in order to perform the analysis. Each of these is considered by Tectonic to be both reasonable and consistent with current standards of practice.

1. Tower member sizes and material properties are as indicated on the Fred A. Nudd drawing.

2. All bracing members, except those in the top 30' portion of the tower, are considered as pin-ended for simplicity, and connections were not modeled.
3. The tower and foundations were constructed according to the approved plans.
4. The connection of the tower to its foundation is considered as pinned.

We note that the material properties indicated on the Fred A. Nudd drawing provided appear to exceed the values published in the applicable ASTM standards.

5.4 Results

Tower member forces have been calculated using current loading criteria, and member capacities have been determined.

Under loading condition 1 described in Section 5.2, we find that several of the diagonal bracing members will be overstressed. The results of our analysis for the critical members in each section are shown in the following table:

Elevation (ft)	Leg Capacity (kips)	Maximum Leg Force (kips)	% of Cap.	Brace Capacity (kips)	Maximum Brace Force (kips)	% of Cap.
0 – 20	315.9	248.7	79	6.6	4.8	73
20 – 40	315.9	218.7	69	5.1	3.7	72
40 – 60	220.4	187.1	85	5.0	3.2	65
60 – 80	220.4	150.4	68	6.2	3.2	52
80 – 100	122.2	110.6	91	9.0	4.8	73
100 – 120	82.3	62.9	76	2.8 (D)	3.5	124
				6.1 (H)	1.0	17
120 – 130	42.1	8.6	20	3.0 (D)	1.2	41
				6.1 (H)	0.3	5

Note: "D" indicates diagonal members, and "H" indicates horizontal members.

The resulting foundation reactions are as follows:

	Fred A. Nudd Orig. Design	Current Analysis	Percentage
Shear (kips)	21.7	19.9	91%
Uplift (kips)	252.6	243.1	96%
Overturning moment (kip-ft)	1685.3	1610.4	96%

The calculated reactions are less than those used in the original foundation design.

Under loading condition 2, some of the diagonal bracing members will still be overstressed. The results of our analysis for the critical members in each section are shown in the following table:

Elevation (ft)	Leg Capacity (kips)	Maximum Leg Force (kips)	% of Cap.	Brace Capacity (kips)	Maximum Brace Force (kips)	% of Cap.
0 – 20	315.9	245.4	78	6.6	4.8	73
20 – 40	315.9	215.0	68	5.1	3.7	74
40 – 60	220.4	182.9	83	5.0	3.3	66
60 – 80	220.4	145.5	66	6.2	3.3	53
80 – 100	122.2	104.7	86	9.0	2.8	31
100 – 120	82.3	58.6	71	2.8 (D)	2.9	103
				6.1 (H)	1.0	16
120 – 130	42.1	8.6	20	3.0 (D)	1.2	41
				6.1 (H)	0.3	5

Note: "D" indicates diagonal members, and "H" indicates horizontal members.

In addition, the resulting foundation reactions are as follows:

	Fred A. Nudd Orig. Design	Current Analysis	Percentage
Shear (kips)	21.7	19.8	91%
Uplift (kips)	252.6	239.9	95%
Overturning moment (kip-ft)	1685.3	1588.9	94%

The calculated reactions are less than those used in the original foundation design.

6.0 CONCLUSIONS AND RECOMMENDATIONS

As a result of our analysis, we find that the existing tower does not have sufficient capacity to support the proposed Sprint antennas at the 118' level along with AT&T antennas at the 108' level. The diagonal bracing members (a total of 18 members) from the 100' level to approximately the 109' level will be significantly overstressed. Reinforcement of these members is required to accommodate the increased loads in order to comply with the requirements of current applicable codes. All other members are adequate for supporting the proposed antenna configuration.

If the proposed AT&T antennas are to be installed at the alternate elevation of the 95' level, the overstress in the tower members is reduced. The diagonal bracing members (a total of 12 members) from the 100' level to approximately the 105' level will be slightly overstressed. Reinforcement of these members is required to accommodate the increased loads in accordance with the requirements of current applicable codes. All other members and the existing foundation are adequate for supporting the proposed antenna configuration.

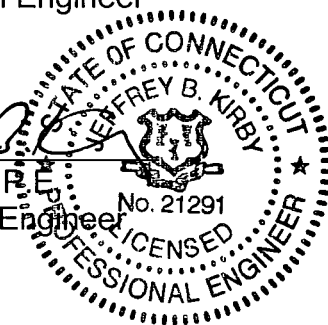
In either case, the foundation reactions resulting from our analysis are less than those used in the original design. The existing foundation will have sufficient capacity to support the proposed Sprint and AT&T antennas and related cables. No structural problems for the foundation are anticipated, and no modifications are necessary.

The proposed Sprint and AT&T cables must be installed evenly on two (2) different tower faces from the existing Nextel cables.

Any further changes to the antenna configuration or other appurtenances should be reviewed with respect to their effect on structural loads prior to implementation.

Prepared by: George F. Moxham
George F. Moxham, P.E.
Senior Structural Engineer

Reviewed by: Jeffrey B. Kirby Date: 4/27/01
Jeffrey B. Kirby, P.E. No. 21291
Chief Structural Engineer



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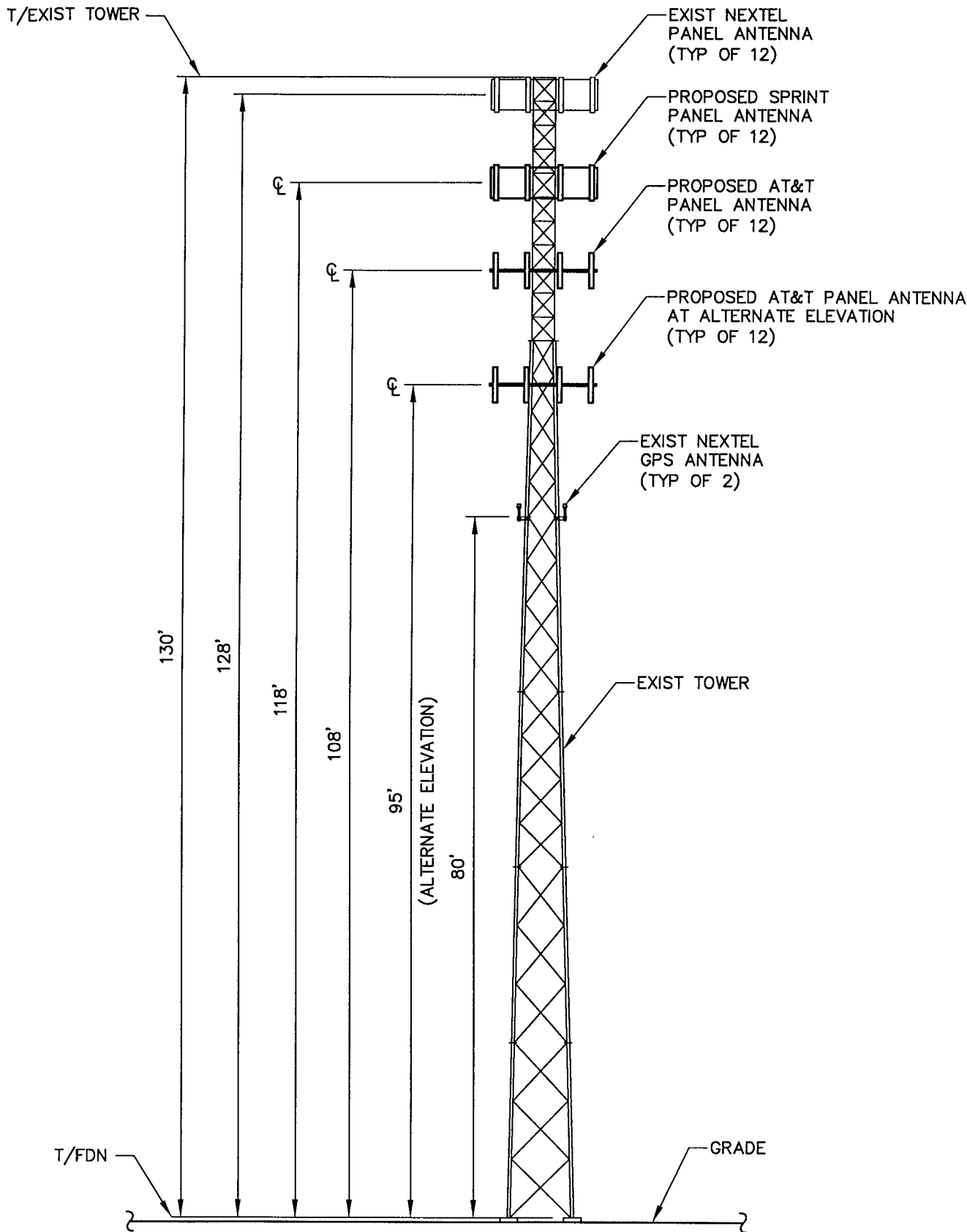


FIGURE 1



CT-273.1.4 Site Summary
 MPE (Maximum Possible Exposure) Study
 July 19, 2001

A. Owner of the structure on which the antenna is located and the location of the antenna:

Name of owner of the structure on which the antenna is located:	
Owner of Structure:	St Paul's Church
Address of structure:	2755 Main St
	Glastonbury , CT

Latitude:	41° 42' 52"
Longitude:	72° 36' 47"

B. Owner of the antenna:

Name of the owner of the antenna:	AT&T Wireless Services
Address of antenna owner:	12 Omega Drive
	Stamford, CT 06907
Telephone number:	(203) 602-7029

C. Technical specifications:

FCC class (or type) of service:	PCS (IS-136)
Operating frequency of transmitter:	1965-1970MHz
Peak power output of transmitter:	8 Watts/per channel
Power into the antenna:	4 watts
Antenna manufacturer:	Allgon
Antenna model:	7184.14
Antenna type:	Panel
Gain of the antenna:	14.5 dBd
Antenna radiating pattern:	H-plane - 90° E-plane -6.5°
Polarization of radiation from antenna:	Linear, Vertical
Effective radiating power:	901.88 ERP at centerline (maximum)

D. Power density information:

The power density values presented in the attached studies were achieved according to FCC OET-65 using the following formula:

$$S = \frac{33.4 \times P}{R^2} \quad (\text{Equation 9, FCC OET-65})$$

Where: S = Power density in $\mu\text{W}/\text{cm}^2$
 P = Power (watts) ERP (effective radiated power)
 R = Distance (meters)

Three measurements were taken for this structure. Besides the AT&T carrier information, the measurements for Nextel and Sprint were also included for the purposes of this study. Given the above equation, the worse case ground scenario is located at the base of the tower.

The results of this analysis indicate that the maximum level of RF energy in areas normally accessible to the public is below all applicable health and safety limits. Specifically, the maximum level of RF energy associated with simultaneous and continuous operation of all proposed transmitters will be less than 9.68% of the safety criteria adopted by the Federal Communication Commission as mandated by the Telecommunications Act of 1996. The Telecommunications Act of 1996 is the applicable Federal law with respect to consideration of the environmental effects of RF emissions in the siting of personal wireless facilities. The maximum level of RF energy will also be less than 9.68% of the exposure limits of ANSI, IEEE, NCRP, and the limits used by all states that regulate RF exposure.

Carrier	Power Density ($\mu\text{W}/\text{cm}^2$)	Maximum Allowable ($\mu\text{W}/\text{cm}^2$)	Percentage of Maximum
AT&T	27.79	1000	2.78%
Nextel	19.75	566.6	3.49%
Sprint PCS	34.08	1000	3.41%
Total	81.62		9.68%

The calculations of these values are shown on the attached spreadsheets.

To the best of my knowledge, the statements made and information disclosed in this study are true, complete, and correct.

7-19-01 Alex Murillo
 Date Alex Murillo, RF Engineer



Date: July 19, 2001

CT-273.1.4
Base of tower

ERP Calculator - Nextel		ERP Calculator (Start here)		Carrier 1	
Max Power to Ant port (dBm)	Art Gain on determined lobe (dBd)	ERP (dbm)	Max Power to Ant port (dBm)	Art Gain on determined lobe (dBd)	ERP (dbm)
49.542425	10	59.542425	0.000000	0	0.000000
(watts per channel)	Maximum Number of Channels	(watts)	(watts per channel)	Maximum Number of Channels	(watts)
10.000000	9	900.000000	0.000000	0	0.000000

ERP Calculator - SPRINT PCS		ERP Calculator (Start here)		Carrier 2	
Max Power to Ant port (dBm)	Art Gain on determined lobe (dBd)	ERP (dbm)	Max Power to Ant port (dBm)	Art Gain on determined lobe (dBd)	ERP (dbm)
61.205739	10	61.205739	0.000000	0	0.000000
(watts per channel)	Maximum Number of Channels	(watts)	(watts per channel)	Maximum Number of Channels	(watts)
12.000000	11	1320.000000	0.000000	0	0.000000

ERP Calculator - AT & T		ERP Calculator (Start here)		Carrier 3	
Max Power to Ant port (dBm)	Art Gain on determined lobe (dBd)	ERP (dbm)	Max Power to Ant port (dBm)	Art Gain on determined lobe (dBd)	ERP (dbm)
45.051500	14.5	59.551500	0.000000	0	0.000000
(watts per channel)	Maximum Number of Channels	(watts)	(watts per channel)	Maximum Number of Channels	(watts)
4.000000	8	901.882538	0.000000	0	0.000000

Field density		NEXTEL		SPRINT PCS		AT & T	
BAND/FREQUENCY (MHz)	850	1900	1900				
Signal Level (E.R.P. dbm)	59.542425	61.205739	59.551500				
Antenna Centerline Height (ft)	128	118	108				
Antenna Centerline Height (m)	39.014400	35.966400	32.918400				
Signal Level (E.R.P. Watts)	900.000000	1320.000000	901.882538				
Field Density (uW/cm2)	19.748727	53.830836	81.629185				
Cumulative Density (uW/cm2)	566.666667	1000.000000	1000.000000				
Maximum Density OET-65 (uW/cm2)	3.49%	3.41%	2.78%				
% of Maximum Density	3.49%	6.89%	9.67%				
Cumulative Percentage							

Percentage of Maximum _____

81.63 uW/cm2 Cumulative Density
9.67% Cumulative % of maximum allowable level.

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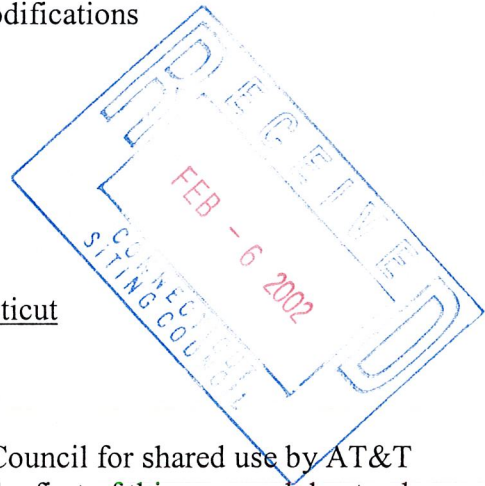
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BARRY E. LONG**

February 6, 2002

BY HAND

Mr. Derrick Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: AT&T Wireless – Post Approval Construction Modifications
Chapel Street, Stratford, Connecticut
474 Main Street, Monroe, Connecticut
2577 Main Street, Glastonbury, Connecticut
1214 Farmington Avenue, Bristol, Connecticut
Flanders Road, East Lyme, Connecticut
238 Meriden Road, Middlefield, Connecticut
Old Route 79, Madison, Connecticut
Noroton Heights Railroad Station, Darien, Connecticut



Dear Mr. Phelps:

The above referenced sites were approved by the Council for shared use by AT&T Wireless (“AT&T”) in the fourth quarter of 2001. As of the first of this year and due to changes in the technology being deployed by AT&T in the State, some of its equipment specifications have changed. Universally, the equipment to be deployed at each of the above referenced sites requires less ground space than previously required and approved by the Council.

The purpose of this letter is to outline those material changes at each site as they relate to the Council’s prior approvals. Further, we respectfully request that these changes be handled as a construction related matter by Council staff and that this letter be added to the Council’s respective files for purposes of future clarity. The following material changes are proposed:

CUDDY & FEDER & WORBY LLP

February 6, 2002

Page 2

Petition No. 528 - Chapel Street, Stratford, Connecticut

Replace approved 12'-0" x 20'-0" concrete equipment pad with a 5'-3" x 6'-0" concrete equipment pad for the initial build and an adjacent 5'-3" x 6'-0" concrete equipment pad for potential growth. The proposed Lucent equipment cabinets will be replaced with two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for the initial build and two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for potential growth.

TS-AT&T-085-011017 - 474 Main Street, Monroe, Connecticut

Replace approved 16'-0" x 8'-6" concrete equipment pad with a 5'-3" x 6'-0" concrete equipment pad for the initial build and an adjacent 5'-3" x 6'-0" concrete equipment pad for potential growth. The proposed Lucent equipment cabinets will be replaced with two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for the initial build and two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for potential growth.

TS-AT&T-054-010906 - 2577 Main Street, Glastonbury, Connecticut

Replace approved 12'-0" x 20'-0" equipment shelter with a 5'-3" x 6'-0" concrete equipment pad for the initial build and an adjacent 5'-3" x 6'-0" concrete equipment pad for potential growth. The proposed Lucent equipment cabinets will be replaced with two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for the initial build and two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for potential growth.

TS-AT&T-017-010927 - 1214 Farmington Avenue, Bristol, Connecticut

Replace Lucent equipment cabinets with two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for the initial build and two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for potential growth

Petition No. 530 - Flanders Road, East Lyme, Connecticut

Replace approved 12'-0" x 20'-0" concrete equipment pad with a 5'-3" x 6'-0" concrete equipment pad for the initial build and an adjacent 5'-3" x 6'-0" concrete equipment pad for potential growth. The proposed Lucent equipment cabinets will be replaced with two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for the initial build and two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for potential growth

February 6, 2002

Page 3

TS-AT&T-082-011017 - 238 Meriden Road, Middlefield, Connecticut

Replace approved 12'-0" x 20'-0" concrete equipment pad with a 5'-3" x 6'-0" concrete equipment pad and replace proposed Lucent equipment cabinets with two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D.

TS-AT&T-076-010827 - Old Route 79, Madison, Connecticut

Replace approved 17'-10" x 8'-6" concrete equipment pad with a 5'-3" x 6'-0" concrete equipment pad for the initial build and an adjacent 5'-3" x 6'-0" concrete equipment pad for potential growth. The proposed Lucent equipment cabinets will be replaced with two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for the initial build and two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D for potential growth.

Petition No. 529 – Noroton Heights Railroad Station, Darien, Connecticut

Replace approved 12'-0" x 20'-0" concrete equipment pad with a 5'-3" x 6'-0" concrete equipment pad and replace proposed Lucent equipment cabinets with two Nokia equipment cabinets, each 76.4"H x 30.3"W x 29.5"D.

Should you, the Council or staff have any questions, please do not hesitate to contact us. Thank you for your consideration of the foregoing.

Very truly yours,



Christopher B. Fisher

cc: Carmen Chapman, AT&T Wireless
Harold Hewett, Bechtel Telecommunications