Logged

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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

June 12, 2000

Troy Riccitelli
Regional Manager
SNET Real Estate
Southern New England Telephone
310 Orange Street
New Haven, CT 06510

RE: EM-SNET-034-000519 - Southern New England Telephone Company notice of intent to modify an existing telecommunications facility located at Moses Mountain in Danbury, Connecticut.

Dear Mr. Riccitelli:

At a public meeting held on June 7, 2000, 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 dated May 19, 2000. 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/RKE/jlh

c: Honorable Gene F. Eriquez, Mayor, City of Danbury
Sandy M. Carter, Verizon Wireless

EM-SNET-

Southern New England Telephone
310 Orange St. 6th Floor
New Haven, Connecticut 06510
Phone (203) 771 8832
Fax (203) 865 3549

May , 2000

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Notice of Exempt Modification for facilities owned by the Southern New England Telephone Company (SNET) at Moses Mountain in Danbury, Connecticut.

Dear Chairman Gelston:

Enclosed is Notice of Intent to Modify an Exempt Tower and Associated Equipment for facilities owned by the Southern New England Telephone Company (SNET) at Moses Mountain in Danbury, Connecticut.

The proposed modification can be generally described as the addition of eight (8) cellular panel-type antennas and associated radio equipment for Cellco Partnership d/b/a Verizon Wireless. Please accept this letter as notification, pursuant to R.C.S.A. Sec. 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Sec. 16-50j-72(b)(2). In accordance with R.C.S.A. Sec. 16-50j-73, a copy of this letter is being sent to the Mayor of Danbury, Gene F. Eriquez.

The existing facility consists of a 65-foot steel communications tower and two communications equipment shelters. One shelter and the tower are owned and operated by SNET. A second equipment shelter is owned by Springwich Cellular Limited Partnership and cellular antennas are presently located on the tower.

Attached is the Federal Aviation Administration Aeronautical Study No. 99-ANE-0313-OE File Approval Dated 06/18/99. The FAA has cleared antennas to be mounted on top of the Moses Mountain, Danbury, Connecticut tower to a maximum antenna tip height of Seventy-six (76) feet AGL.

The tower was formally used as a microwave site for SNET's telecommunications network and is currently used to facilitate fixed antennas and equipment installations for various tenants as listed in Table 1. SNET's old microwave antennas have been removed from the tower and off the site.

Verizon Wireless plans to attach eight (8) panel antennas, Swedcom Model ALP-E 6014 and a G.P.S. antenna at the 69-foot, 9 ½ inch level on the tower. Verizon Wireless's radio equipment will be located in a proposed 12' x 30' equipment building to be located at the base of the tower and is shown on the attached site plan. The tower is structurally sufficient to support antennas since microwave dish antennas have been removed. Verizon Wireless had requested a review analysis of the tower and a letter from Bayer Engineering is attached. Verizon Wireless will also install a diesel generator for emergency use at the base of the tower. The generator will be installed following receipt of the required DEP permit.

The planned modifications to the Moses Mountain facility fall squarely within those activities explicitly provided for in R.C.S.A. Sec. 16-50j-72(b)(2).

1. The proposed modification will not increase the height of the tower. Verizon Wireless's antennas will be installed with a center line of approximately 69-feet, 9 ½ inches above ground level. The tower profile included on the site plan confirms that the planned changes will not increase the overall height of the tower.

2. The installation of Verizon Wireless's equipment building will be within the leased area. A section of the existing chain link fence will be relocated to accommodate the proposed equipment building. There will be no extension of SNET's leased area.

3. The proposed modification to the facility will not increase the total noise levels at the existing facility be six decibels or more.

4. The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the perimeter of the compound, to a level at or above the applicable standard. Previous site modification requests to the Connecticut Siting Council for the Moses Mountain location included power density charts which noted calculated non-ionizing radiation levels for each emitter. This calculation method is very conservative and the aggregate levels were approaching one hundred percent (100%) of the Maximum Permissible Exposure (MPS) level. RCC Consultants, Inc. conducted actual field measurements of the non-ionizing radiation levels for SNET and all known transmitters operating at the site as depicted in Table 1. In November 1997, the Field Study and Safety Analysis was performed. The measured levels are shown as a percentage of the MPE levels. They were well below the maximum allowed. A copy of the Study is attached. In June 1999, SNET submitted a Notice of Intent to Modify this tower and added antennas for Pagenet, Inc. and BellSouth Wireless. The Council approved the modification in July 1999, and SNET had modified the 1997 Report. The 1997 measured levels together with the calculated levels of the additional emitters in 1999 were well below the MPE level. Verizon Wireless has performed a power density calculation for their emissions and submitted it for this report.

It is included in Table 2 and Table 3.
Verizon Wireless's operations would add 0.1082 mW/cm2, or 18.56% of the FCC Standard of 0.583 mW/cm2. The total percent of standard at the boundary Will be 69.291%.

Conclusion

The proposed addition does not constitute a " modification" of an existing facility as defined in the Connecticut General Statutes Section 16-50I(d). There will be no change to the tower height or extension of the boundaries of the site. There will be no increase in noise levels at the site's boundary by six (6) decibels or more and the total radio frequency electromagnetic radiation is not above the standard set forth in Section 22(a)-162 of the Connecticut General Statutes. This addition will not have a substantially adverse environmental effect.

For the foregoing reasons, Southern New England Telephone Company (SNET) respectfully submits that the proposed addition of antennas and equipment at the Moses Mountain, Danbury facility constitutes an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Thank you for your consideration of this matter.

Pursuant to Connecticut General Statutes Section 16-50v-1(a) of the Regulations of Connecticut State Agencies, the Application has submitted a check in the amount of $500.00 for the required filing fee.

Sincerely,

Troy Riccitelli
Regional Manager SNET Real Estate

Attachments

Cc: Gene F. Eriquez, Mayor, City of Danbury
Sandy M. Carter, Verizon Wireless

RCC Consultants, Inc. conducted actual field measurements of the non-ionizing radiation levels for SNET on all known transmitters operating at the site as depicted in Table 1. No additional emitters have been added since November 1997 when the Field Study and Safety Analysis was performed. The measured levels are shown as a percentage of the MPE levels. They are well below the maximum allowed. A copy of the study is attached.

Table 2 outlines the calculated levels of the proposed additional emitters. The non-ionizing radiation levels are expressed in both milliwatts per centimeter squared (mW/cm^2) and by percentage of MPE.

Finally, the measured levels together with the calculated levels of the proposed additional emitters will be well below MPE levels.

Table 3 outlines the measured levels, calculated levels, and the TOTAL MPE in terms of percentage.

CONCLUSION

The proposed additions do not constitute a 'modification' of an existing facility as defined in the Connecticut General Statutes Section 16-50I (d). There will be no change to the tower structure height or extension of the boundaries of the site. The tower is structurally sufficient to support antennas since microwave dish antennas have been removed.

There will be no increase in noise levels at the site's boundary by six (6) decibels or more and the total radio frequency electromagnetic radiation will not be at or above the standard limit set forth in Section 22 (a) – 162 of the Connecticut General Statutes. These additions will not have a substantially adverse environment effect.

For these reasons, SNET requests that the Council acknowledges that this Notice of Modifications meets the Council's exemption criteria.

TABLE 1

EXISTING SERVICES	TOP OF ANTENNA Height (feet)
Connecticut State Police	
Antenna # 1	61'
Antenna # 2	59'
Pagenet	
Antenna # 1	59'
Personal Vision	
Antenna # 1 (receive only)	53'
Shelter Roof	15'
SNET TMRS	
Antenna # 1	65'
SCLP (SNET Mobility)	
Antenna # 1	64'
WRNN	
Antenna # 1 (receive only)	50'
Destineer / SkyTel	
Antenna # 1	50'

TABLE 2

FCC OET Bulletin 65, Edition 97-01 was used to perform the calculations.

Service	Power Density @ Site Boundary mW/cm^2	Power Density @ Tower Base mW/cm^2	Antenna Radiation Center Height (feet)	CT/ANSI Standard mW/cm^2	% of Standard @Site Boundary
Pagenet, Inc.					
Antenna # 1. TX Only	**0.0770**	**0.1136**	58'		**12.275%**
Antenna # 2. RX Only	0	0	58'	0	0%
Antenna # 3. RX Only	0	0	58'	0	0%
BellSouth Wireless Data Antenna # 1.	**0.0104**	**0.0132**	76'		**1.656%**
Verizon Wireless	**0.1082**	**0.1404**	69.75'	**0.583**	**18.56%**
Total					**32.491%**

TABLE 3

Services	Description	% of Standard @Site Boundary
Measured	All emitters from Table 1 per Field Study and Safety Analysis	**36.8%**
Calculated	All emitters from Table 2	**32.491%**
Total		**69.291%**

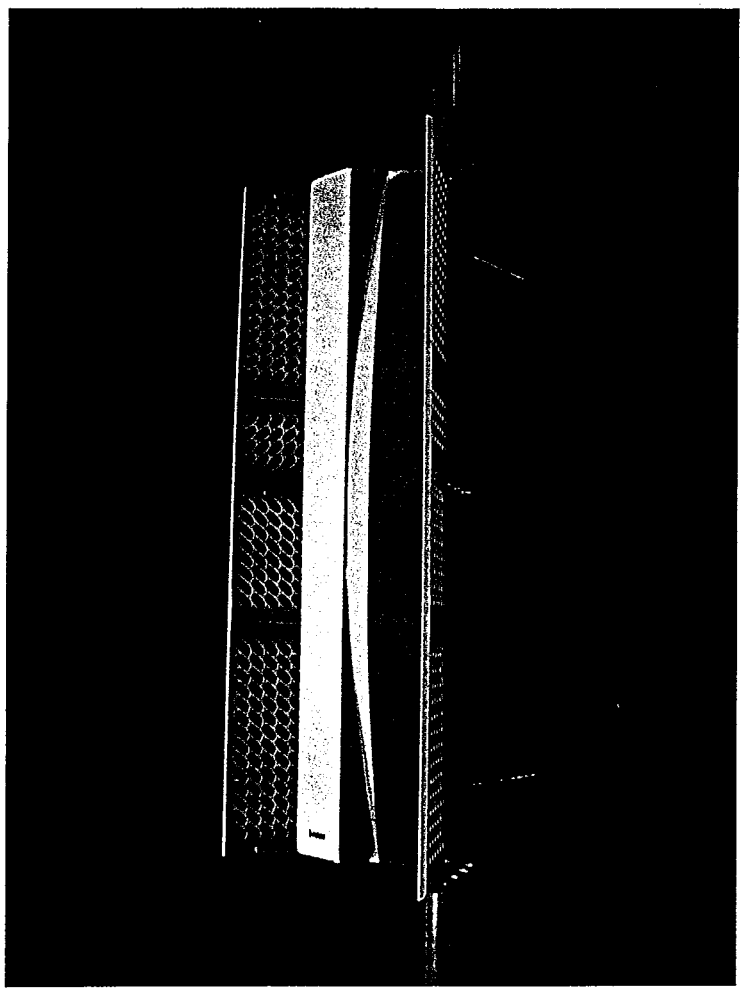
Swedcom

ALP-E 6014-Din

Enhanced Log-Periodic Antenna

Features:

- ❑ **Small Size**
- ❑ **Aesthetically Pleasing**
- ❑ **Suitable For TDMA/CDMA/GSM**
- ❑ **High Return Loss**
- ❑ **Low Intermodulation**
- ❑ **High FTB**
- ❑ **Broadbanded**
- ❑ **Side-lobe Suppression**
- ❑ **Sturdy Design**
- ❑ **Down-Tilt Brackets Incl.**



Electrical Specification

Frequency Range:	**800-900 MHz**
Impedance:	**50 ohm**
Connector Type:	**7/16 Din**
Return Loss:	**20 dB**
Polarization:	**Vertical**
Gain:	**> 13 dBd**
Front To Back Ratio:	**> 30 dB**
Side-Lobe Suppression:	**18 dB**
Intermodulation (2x25W):	**IM3 > 146 dB**
	IM5 > 153 dB
	IM7/9 > 163 dB
Power Rating:	**500 W**
H-Plane (-3 dB point):	**56 - 60°**
V-Plane (-3 dB point):	**16 - 18°**
Lightning Protection:	**DC Grounded**

Mechanical Specification

Overall Height:	**43 in**	**[1092 mm]**
Width:	**16 in**	**[406 mm]**
Depth:	**11.5 in**	**[290 mm]**
Weight Including Tilt-Brackets:	**27 lbs**	**[12.3 Kg]**
Wind load measured up to:	**150 mph**	**[240 Km/h]**
Wind Area (Side of antenna):	**4.7 sq. ft.**	**[0.44 sq.m]**
Lateral Thrust At 113 mph/ 180Km/h (Worst Case):	**241 lbs**	**[1070 N]**

Materials

Radiating Elements:	**Aluminum**
Extrusion:	**Aluminum**
Radome:	**Grey PVC**
Tilt-Bracket:	**Hot Dip Galvanized Steel**
Antenna Bolts:	**Stainless Steel**

The ALP-E 6014-Din is made in U.S.A.

BAYAR ENGINEERING, P.C.
Structural Engineers
P.O. Box 1287, Port Chester, N.Y. 10573-8287
TEL: (914) 921-4067 FAX: (914) 967-2147

Demirtas C. Bayar, P.E.

May 1, 2000

Mr. Mark Gauger
Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

Re: Moses Mtn., CT
BE Job No. 9912

Dear Mr. Gauger,

The proposed additions to the existing 65' special tower at Moses Mtn., Danbury, CT will include the installation of eight (8) cellular ALP-E-6014 antennas, four toward an azimuth of 195 degrees and four toward an azimuth of 320 degrees, at a centerline of 70' above the base of the tower. The antennas will be mounted on pipes extended above a steel frame. The work will also include the relocation of the existing mobile antenna mast extending above the top of the tower from Face C to Face B of the tower. Additionally, new cross bracing steel members will be installed on the bottom 25' panel of the tower. With the installation of the cross bracing the tower will be structurally adequate and will satisfy the tilt and twist requirements of the parabolic antennas.

The existing beacon light will be raised by 6'-0" from its present location to become 71'-8" above average grade at tower.

Yours truly,

Demirtas C. Bayar, P.E.
President

Southern New England Telephone Co.
310 Orange St., 6th. Floor
New Haven, Connecticut 06510
Phone (203) 771 8832
Fax (203) 865-3549

May 19, 2000

Honorable Gene F. Eriquez, Mayor
City of Danbury
City Hall
155 Deer Hill Avenue
Danbury, Connecticut 06810

Dear Mayor Eriquez:

This letter is to inform you that Southern New England Telephone company (SNET) plans to install antennas and associated equipment at the approved tower facility located at Moses Mountain, Danbury, Connecticut. As required by Section 16-50j-73 of the Regulations of the Connecticut State Agencies (R.C.S.A.), please accept this letter and the attached letter to the Connecticut Siting Council dated May 19, 2000.

The attached letter fully describes SNET's proposal. However, if you have any questions or require any further information on our plans or the siting Council's procedures, please call me at (203) 771-8832 or Joel Rinebold, Executive Director, Connecticut siting Council at (869) 827-2935.

Sincerely,

Troy Riccitelli
Regional Manager SNET Real Estate

SNET MOSES MTN

Federal Aviation Administration
NEW ENGLAND REGION, ANE-520
12 NEW ENGLAND EXECUTIVE PARK
BURLINGTON, MA 01803

AERONAUTICAL STUDY
No: 99-ANE-0313-OE
PRIOR STUDY
No: 99-ANE-0127-OE

ISSUED DATE: 06/18/99

TROY RICCITELLI
SOUTHERN NEW ENGLAND TELEPHONE CO
2 HAMILTON ST., 2ND FL.-REAL ESTATE
NEW HAVEN, CT

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Description: ANTENNA TOWER
SEE ATTACHED
Location: DANBURY CT
Latitude: 41-21-34.31 NAD 83
Longitude: 073-27-55.73
Heights: 76 feet above ground level (AGL)
1058 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

-As a condition to this determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1J, Obstruction Marking and Lighting, Chapters 3(Marked), 4, 5(Red), & 13.

-It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office ~~any time the project is abandoned or:~~

~~___ At least 10 days prior to start of construction (7460-2, Part I)~~

~~___ Within 5 days after construction reaches its greatest height (7460-2, Part II)~~

-See attachment for additional condition(s) or information.

This determination expires on 12/18/00 unless:

(a) extended, revised or terminated by the issuing office or
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case the determination expires on the date prescribed by the FCC for completion of construction or on the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

-As a result of this structure being critical to flight safety, it is

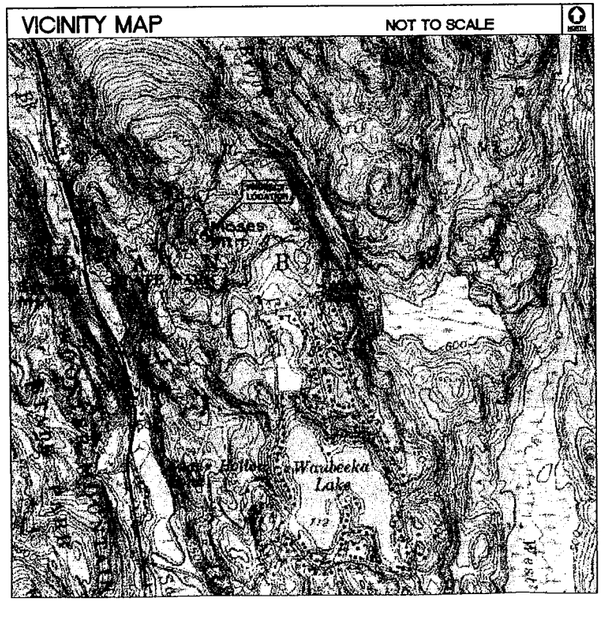
90 db

verizon wireless

WIRELESS COMMUNICATIONS FACILITY

DANBURY SOUTH
MOSES MOUNTAIN
DANBURY, CONNECTICUT

VICINITY MAP — NOT TO SCALE



LEGEND

SYMBOL	DESCRIPTION
	SECTION OR DETAIL NUMBER SHEET WHERE DETAIL/SECTION OCCURS
1	ELEVATION NUMBER SHEET WHERE ELEVATION OCCURS

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	00
C-1	SITE PLAN	00
C-2	TOWER ELEVATION	00

REVISIONS		
01	05/12/00	CT SITING COUNCIL
02		
03		
04		
05		

verizon wireless

Natcomm, LLC · Engineering Consultants

Natcomm, L.L.C.
83-2 North Branford Road
Branford, Connecticut 06405
Tel. (203) 488-0580
Fax (203) 488-8587

Consulting Engineers · Project Management
Site Acquisition · Communications Installations

PROFESSIONAL ENGINEER SEAL

DANBURY SOUTH
VERIZON WIRELESS
PROJECT
NO. 943655

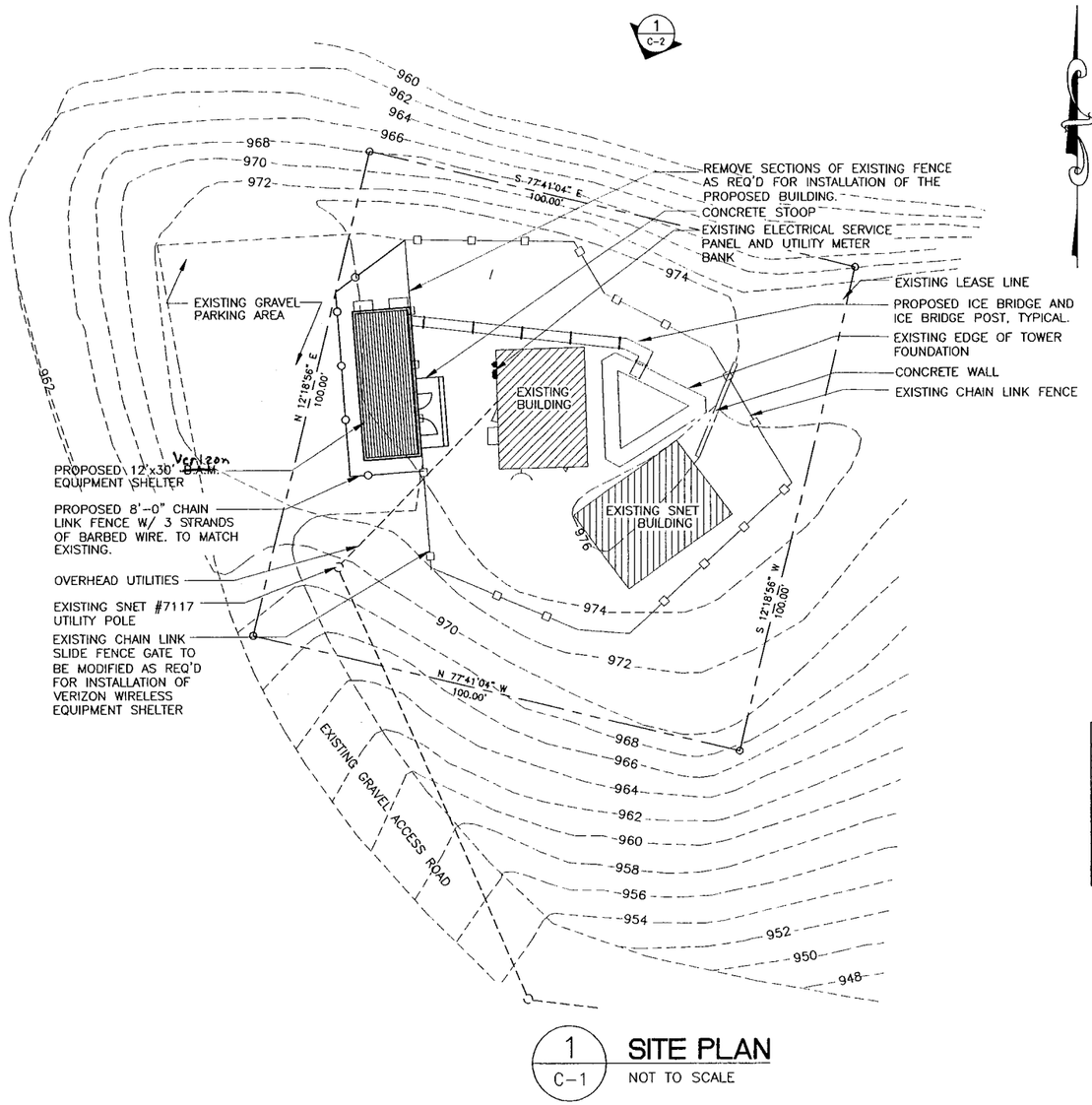
MOSES MOUNTAIN
DANBURY, CONNECTICUT

PROJECT NO:	995214
DRAWN BY:	CTW
CHECKED BY:	CFC
SCALE:	NONE
DATE:	10/14/99

TITLE SHEET

T-1

DWG. 1 OF 3



1 / C-1 **SITE PLAN**

NOT TO SCALE

NOTE: COORDINATES FOR LATTICE TOWER ARE THE FOLLOWING:

LATITUDE: (NAD 83) 41°-21'-34.31"
(NAD 27) 41°-21'-33.96"
LONGITUDE: (NAD 83) 73°-27'-55.73"
(NAD 27) 73°-27'-57.29"

FROM DRAWINGS PREPARED FOR SNET MOBILITY, INC. DATED FEBRUARY 1999 BY URS GREINER WOODWARD-CLYDE, INC.

LEGEND

- 000 EXISTING CONTOUR
- EXISTING LEASE LINE
- PROPOSED FENCE
- EXISTING FENCE
- EXISTING LEASE AREA CORNER

REVISIONS		
01	05/12/00	CT SITING COUNCIL
02		
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04		
05		

verizon wireless

Natcomm, LLC - Engineering Consultants

Natcomm, L.L.C.
63-2 North Branford Road
Branford, Connecticut 06405
Tel. (203) 488-0580
Fax (203) 488-8587

Consulting Engineers - Project Management
Site Acquisition - Communications Installations

PROFESSIONAL ENGINEER SEAL

DANBURY SOUTH VERIZON WIRELESS PROJECT NO. 943655

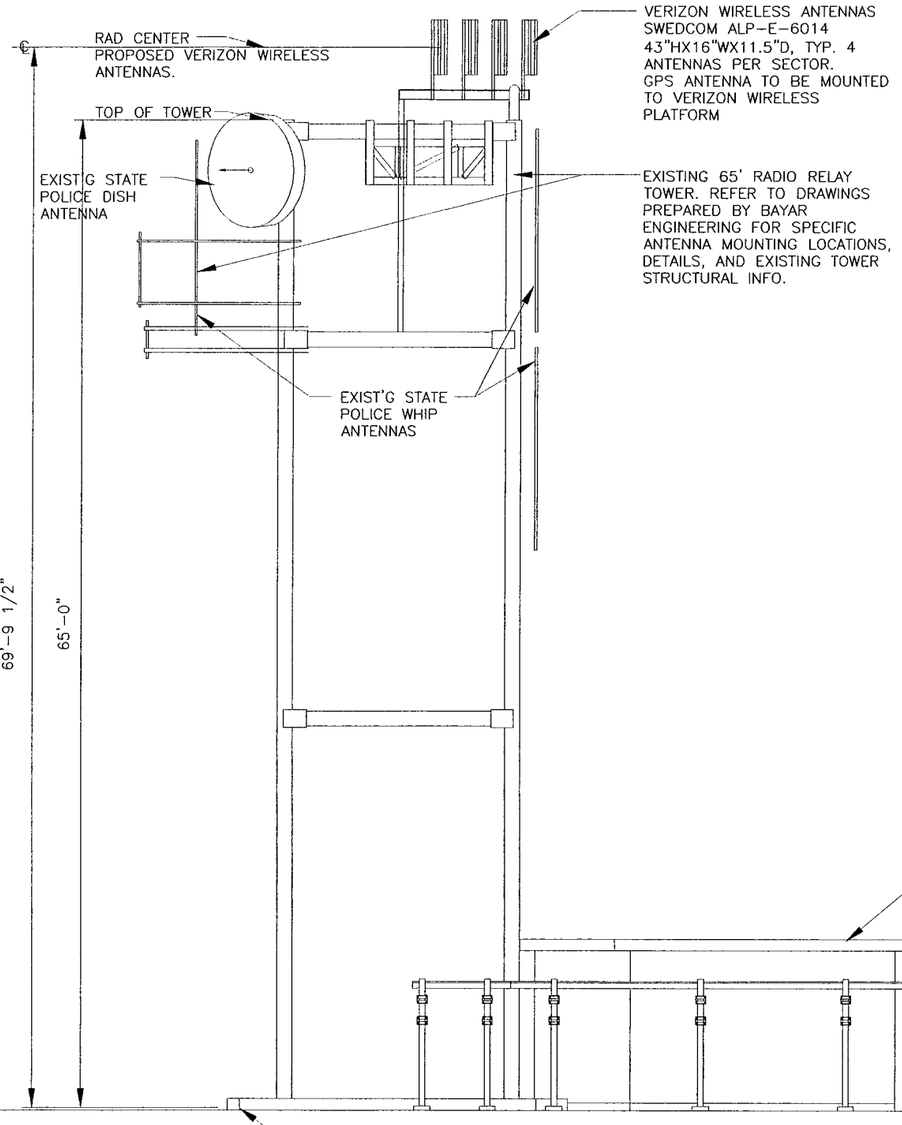
MOSES MOUNTAIN
DANBURY, CONNECTICUT

PROJECT NO:	995214
DRAWN BY:	CTW
CHECKED BY:	CFC
SCALE:	AS NOTED
DATE:	10/14/99

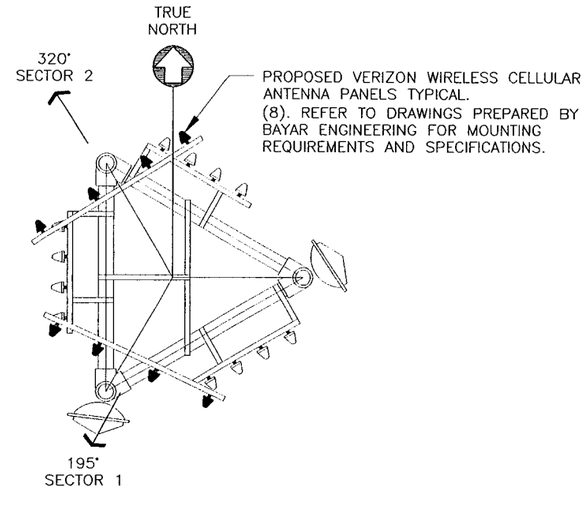
SITE PLAN

C-1

DWG. 1 OF 3



1/C-2 **TOWER ELEVATION**
NOT TO SCALE



2/C-2 **ANTENNA CONFIGURATION DETAIL**
NOT TO SCALE

REVISIONS		
01	05/12/00	CT SITING COUNCIL
02		
03		
04		
05		

verizon wireless

Natcomm, LLC · Engineering Consultants
NATCOMM
Natcomm, L.L.C.
53-2 North Branford Road
Branford, Connecticut 06405
Tel. (203) 488-0580
Fax (203) 488-8587
Consulting Engineers - Project Management
Site Acquisition - Communications Installations

PROFESSIONAL ENGINEER SEAL

DANBURY SOUTH
VERIZON WIRELESS
PROJECT
NO. 943655

MOSES MOUNTAIN
DANBURY, CONNECTICUT

PROJECT NO:	995214
DRAWN BY:	CTW
CHECKED BY:	CFC
SCALE:	AS NOTED
DATE:	10/14/99

TOWER ELEVATION

C-2

DWG. 3 OF 3